

Table 20.1
Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Both Sexes by Race/Ethnicity

	Joinpoint Trend 1		Joinpoint Trend 2		Joinpoint Trend 3		Joinpoint Trend 4		Joinpoint Trend 5		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2007</u>												
All Races	1975-1979	1.6	1979-2007	-1.0*							-1.0*	-1.0*
White	1975-2007	-0.8*									-0.8*	-0.8*
Black	1975-1984	2.5*	1984-2007	-2.5*							-2.5*	-2.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.2*									-1.2*	-1.2*
White	1992-2007	-0.9*									-0.9*	-0.9*
Black	1992-2007	-2.7*									-2.7*	-2.7*
<u>SEER 9 Observed Incidence^a, 1975-2007</u>												
All Races	1975-1981	0.7	1981-2007	-1.1*							-1.1*	-1.1*
White	1975-2007	-0.9*									-0.9*	-0.9*
Black	1975-1984	2.5*	1984-2007	-2.6*							-2.6*	-2.6*
<u>SEER 13 Observed Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.3*									-1.3*	-1.3*
White	1992-2007	-1.1*									-1.1*	-1.1*
White NH ^{ef}	1992-2007	-0.8*									-0.8*	-0.8*
Black	1992-2007	-2.8*									-2.8*	-2.8*
Black NH ^{ef}	1992-2007	-2.9*									-2.9*	-2.9*
API ^e	1992-2007	-1.3*									-1.3*	-1.3*
AI/AN ^{eg}	1992-2007	-3.9*									-3.9*	-3.9*
Hispanic ^f	1992-2007	-2.1*									-2.1*	-2.1*
<u>U.S. Cancer Mortality^c, 1975-2007</u>												
All Races	1975-1979	-0.5	1979-1993	-1.7*	1993-2000	-2.7*	2000-2007	-1.3*			-1.6*	-1.3*
White	1975-2007	-1.8*									-1.8*	-1.8*
Black	1975-1980	3.3*	1980-1993	-1.5*	1993-2007	-3.9*					-3.9*	-3.9*
<u>U.S. Cancer Mortality^c, 1992-2007</u>												
All Races	1992-2000	-2.6*	2000-2007	-1.4*							-1.6*	-1.4*
White	1992-2007	-1.7*									-1.7*	-1.7*
White NH ^{ef}	1992-2000	-2.1*	2000-2007	-0.7							-1.1*	-0.7*
Black	1992-2007	-3.7*									-3.7*	-3.7*
Black NH ^{ef}	1992-2007	-3.4*									-3.4*	-3.4*
API ^e	1992-2007	-2.6*									-2.6*	-2.6*
AI/AN ^{eg}	1992-2007	-1.9*									-1.9*	-1.9*
Hispanic ^f	1992-2007	-3.0*									-3.0*	-3.0*

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

^c Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

^e API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

^f Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

^g Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

Table 20.2
Cancer of the Oral Cavity and Pharynx for Selected Subsites (Invasive)

Trends in SEER 9 Observed Incidence^a Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints,
By Race and Sex

		<u>Joinpoint Trend 1</u>		<u>Joinpoint Trend 2</u>		<u>Joinpoint Trend 3</u>		<u>Joinpoint Trend 4</u>		<u>Joinpoint Trend 5</u>		<u>AAPC^b</u>
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2003-2007
<u>Cancer of the Tongue</u>												
All Races	Both Sexes	1975-1999	0.4*	1999-2007	1.9*							1.9*
All Races	Male	1975-1999	0.4*	1999-2007	2.2*							2.2*
All Races	Female	1975-2007	0.4*									0.4*
White	Male	1975-1998	0.5*	1998-2007	2.6*							2.6*
White	Female	1975-2007	0.6*									0.6*
Black	Male	1975-1989	1.4	1989-2007	-3.0*							-3.0*
Black	Female	1975-2007	-1.5*									-1.5*
<u>Cancer of the Floor of Mouth, Gum and Other Mouth</u>												
All Races	Both Sexes	1975-1984	0.6	1984-2007	-2.6*							-2.6*
All Races	Male	1975-1984	0.3	1984-2007	-3.1*							-3.1*
All Races	Female	1975-1987	0.1	1987-2007	-2.2*							-2.2*
White	Male	1975-1984	-0.1	1984-2007	-2.8*							-2.8*
White	Female	1975-1987	0.4	1987-2007	-2.3*							-2.3*
Black	Male	1975-1977	54.4	1977-1998	-2.3*	1998-2007	-9.4*					-9.4*
Black	Female	1975-2007	-1.8*									-1.8*
<u>Cancer of the Oropharynx and Tonsil</u>												
All Races	Both Sexes	1975-1999	0.0	1999-2007	2.6*							2.6*
All Races	Male	1975-1995	0.2	1995-2007	2.2*							2.2*
All Races	Female	1975-2007	-1.2*									-1.2*
White	Male	1975-1996	0.3	1996-2007	3.3*							3.3*
White	Female	1975-2007	-1.0*									-1.0*
Black	Male	1975-2007	-0.6									-0.6
Black	Female	1975-2007	-1.9*									-1.9*
<u>Cancer of the Salivary Gland</u>												
All Races	Both Sexes	1975-2007	0.5*									0.5*
All Races	Male	1975-2007	0.6*									0.6*
All Races	Female	1975-2007	0.3									0.3
White	Male	1975-2007	0.6*									0.6*
White	Female	1975-2007	0.3									0.3
Black	Male	1975-1999	2.7*	1999-2007	-8.7*							-8.7*
Black	Female	1975-2007	0.7									0.7
<u>Cancer of the Lip</u>												
All Races	Both Sexes	1975-1997	-3.1*	1997-2007	-5.5*							-5.5*
All Races	Male	1975-1996	-3.7*	1996-2007	-6.2*							-6.2*
All Races	Female	1975-1998	0.2	1998-2007	-3.5*							-3.5*
White	Male	1975-1996	-3.4*	1996-2007	-6.4*							-6.4*
White	Female	1975-1998	0.3	1998-2007	-3.6*							-3.6*
Black	Male	-	-									-
Black	Female	-	-									-

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

^a The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2007.

^b The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2007.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

Table 20.3
Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Males by Race/Ethnicity

	Joinpoint Trend 1		Joinpoint Trend 2		Joinpoint Trend 3		Joinpoint Trend 4		Joinpoint Trend 5		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2007</u>												
All Races	1975-2007	-1.2*									-1.2*	-1.2*
White	1975-2007	-1.1*									-1.1*	-1.1*
Black	1975-1987	1.9*	1987-2007	-3.2*							-3.2*	-3.2*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.4*									-1.4*	-1.4*
White	1992-2007	-1.1*									-1.1*	-1.1*
Black	1992-2007	-3.2*									-3.2*	-3.2*
<u>SEER 9 Observed Incidence^a, 1975-2007</u>												
All Races	1975-2007	-1.2*									-1.2*	-1.2*
White	1975-2007	-1.1*									-1.1*	-1.1*
Black	1975-1987	1.9*	1987-2007	-3.3*							-3.3*	-3.3*
<u>SEER 13 Observed Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.5*									-1.5*	-1.5*
White	1992-2007	-1.2*									-1.2*	-1.2*
White NH ^{ef}	1992-2007	-0.9*									-0.9*	-0.9*
Black	1992-2007	-3.4*									-3.4*	-3.4*
Black NH ^{ef}	1992-2007	-3.4*									-3.4*	-3.4*
API ^e	1992-2007	-1.6*									-1.6*	-1.6*
AI/AN ^{eg}	1992-2007	-6.2*									-6.2*	-6.2*
Hispanic ^f	1992-2007	-2.5*									-2.5*	-2.5*
<u>U.S. Cancer Mortality^c, 1975-2007</u>												
All Races	1975-1977	0.7	1977-1993	-2.0*	1993-2000	-2.9*	2000-2007	-1.2*			-1.6*	-1.2*
White	1975-2000	-2.2*	2000-2007	-1.1*							-1.3*	-1.1*
Black	1975-1980	3.8*	1980-1992	-1.5*	1992-2007	-3.7*					-3.7*	-3.7*
<u>U.S. Cancer Mortality^c, 1992-2007</u>												
All Races	1992-2000	-2.9*	2000-2007	-1.2*							-1.6*	-1.2*
White	1992-2000	-2.6*	2000-2007	-0.8							-1.2*	-0.8*
White NH ^{ef}	1992-2000	-2.4*	2000-2007	-0.5							-0.9*	-0.5
Black	1992-2007	-3.7*									-3.7*	-3.7*
Black NH ^{ef}	1992-2007	-3.4*									-3.4*	-3.4*
API ^e	1992-2007	-2.8*									-2.8*	-2.8*
AI/AN ^{eg}	1992-2007	-2.8									-2.8	-2.8
Hispanic ^f	1992-2007	-3.9*									-3.9*	-3.9*

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

^c Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

^g Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

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- Joinpoint regression line analysis could not be performed on data series.

Table 20.4
Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Females by Race/Ethnicity

	Joinpoint Trend 1		Joinpoint Trend 2		Joinpoint Trend 3		Joinpoint Trend 4		Joinpoint Trend 5		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2007</u>												
All Races	1975-1980	2.5*	1980-2007	-0.9*							-0.9*	-0.9*
White	1975-1981	2.0	1981-2007	-0.9*							-0.9*	-0.9*
Black	1975-2007	-1.4*									-1.4*	-1.4*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.1*									-1.1*	-1.1*
White	1992-2007	-1.2*									-1.2*	-1.2*
Black	1992-2007	-1.3*									-1.3*	-1.3*
<u>SEER 9 Observed Incidence^a, 1975-2007</u>												
All Races	1975-1980	2.6*	1980-2007	-1.0*							-1.0*	-1.0*
White	1975-1981	2.1*	1981-2007	-0.9*							-0.9*	-0.9*
Black	1975-2007	-1.5*									-1.5*	-1.5*
<u>SEER 13 Observed Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.2*									-1.2*	-1.2*
White	1992-2007	-1.3*									-1.3*	-1.3*
White NH ^{ef}	1992-2007	-1.1*									-1.1*	-1.1*
Black	1992-2007	-1.4*									-1.4*	-1.4*
Black NH ^{ef}	1992-2007	-1.4*									-1.4*	-1.4*
API ^e	1992-2007	-0.8									-0.8	-0.8
AI/AN ^{eg}	1992-2007	0.6									0.6	0.6
Hispanic ^f	1992-2007	-1.7*									-1.7*	-1.7*
<u>U.S. Cancer Mortality^c, 1975-2007</u>												
All Races	1975-1990	-0.9*	1990-2007	-2.3*							-2.3*	-2.3*
White	1975-1989	-1.0*	1989-2007	-2.1*							-2.1*	-2.1*
Black	1975-1991	-0.3	1991-2007	-3.6*							-3.6*	-3.6*
<u>U.S. Cancer Mortality^c, 1992-2007</u>												
All Races	1992-2007	-2.3*									-2.3*	-2.3*
White	1992-2007	-2.1*									-2.1*	-2.1*
White NH ^{ef}	1992-2007	-1.9*									-1.9*	-1.9*
Black	1992-2007	-3.7*									-3.7*	-3.7*
Black NH ^{ef}	1992-2007	-3.3*									-3.3*	-3.3*
API ^e	1992-2007	-1.8*									-1.8*	-1.8*
AI/AN ^{eg}	1992-2007	0.1									0.1	0.1
Hispanic ^f	1992-2007	-1.4									-1.4*	-1.4*

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

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^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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^g Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

Table 20.5
Cancer of the Oral Cavity and Pharynx (Invasive)

Delay-adjusted SEER Incidence^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	13.21	21.19	7.10	13.30	21.72	6.93	13.38	20.16	8.25
1976	13.28	21.01	7.38	13.23	21.03	7.37	15.18	23.76	8.37
1977	12.73	20.10	6.95	12.59	19.85	7.01	14.45	23.86	6.65
1978	13.38	20.86	7.71	13.21	20.76	7.58	15.83	25.97	8.05
1979	14.04	21.94	8.01	13.72	21.63	7.74	18.39	28.16	10.64
1980	13.34	20.27	7.91	12.98	19.98	7.60	16.82	25.39	9.59
1981	13.59	20.85	7.92	13.39	20.51	7.94	16.65	28.16	7.46
1982	13.35	20.33	7.93	13.08	19.94	7.85	17.12	27.39	8.86
1983	13.29	21.21	7.25	13.26	21.22	7.31	16.12	26.08	8.32
1984	13.47	20.78	7.86	13.00	20.15	7.64	18.92	30.00	10.08
1985	13.34	19.85	8.24	13.28	19.61	8.36	16.08	25.88	8.53
1986	12.47	19.14	7.19	12.36	18.88	7.29	16.19	28.11	6.97
1987	13.20	20.54	7.51	13.11	20.18	7.67	16.82	30.02	7.00
1988	12.13	18.16	7.31	11.79	17.71	7.09	16.44	25.58	9.09
1989	12.12	18.32	7.26	11.85	17.73	7.30	15.76	27.19	7.06
1990	12.65	19.39	7.34	12.38	18.79	7.41	16.07	27.93	6.93
1991	12.18	18.37	7.26	12.10	18.15	7.31	14.43	23.75	7.33
1992	11.97	18.33	6.93	11.83	18.05	6.94	14.82	25.12	6.95
1993	12.44	18.74	7.30	12.25	18.44	7.23	15.57	24.90	8.12
1994	11.73	17.70	6.84	11.43	16.90	6.94	15.66	26.70	7.01
1995	11.56	16.98	7.20	11.55	16.76	7.36	13.66	22.86	6.68
1996	11.79	17.78	7.00	11.49	17.29	6.89	15.06	24.51	7.65
1997	11.54	17.38	6.78	11.57	17.25	6.91	11.54	18.39	6.22
1998	11.26	16.72	6.77	11.30	16.50	6.95	13.15	22.60	6.36
1999	10.60	15.59	6.48	10.53	15.49	6.39	11.81	19.88	5.85
2000	10.76	16.06	6.30	10.71	15.69	6.46	11.75	20.82	4.90
2001	10.81	15.45	6.91	10.92	15.59	6.96	11.96	18.73	6.96
2002	11.08	16.25	6.72	11.32	16.55	6.85	11.16	17.01	6.56
2003	10.46	15.52	6.15	10.46	15.58	6.03	11.69	16.86	7.59
2004	10.73	15.93	6.23	11.00	16.31	6.30	10.08	16.11	5.64
2005	10.58	15.39	6.47	10.78	15.84	6.37	10.98	16.37	6.99
2006	10.55	15.40	6.36	10.78	15.58	6.55	9.81	16.15	5.07
2007	10.56	15.58	6.21	10.91	16.03	6.34	9.65	15.27	5.43

Additional information on the model used to delay-adjust SEER Incidence rates can be found at (<http://srab.cancer.gov/delay/>).

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 20.6
Cancer of the Oral Cavity and Pharynx (Invasive)
Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	13.21	21.19	7.10	13.30	21.72	6.93	13.38	20.16	8.25
1976	13.28	21.01	7.38	13.23	21.03	7.37	15.18	23.76	8.37
1977	12.73	20.10	6.95	12.59	19.85	7.01	14.45	23.86	6.65
1978	13.38	20.86	7.71	13.21	20.76	7.58	15.83	25.97	8.05
1979	14.04	21.94	8.01	13.72	21.63	7.74	18.39	28.16	10.64
1980	13.34	20.27	7.91	12.98	19.98	7.60	16.82	25.39	9.59
1981	13.59	20.85	7.92	13.39	20.51	7.94	16.65	28.16	7.46
1982	13.34	20.33	7.93	13.08	19.94	7.85	17.12	27.39	8.86
1983	13.29	21.21	7.25	13.26	21.21	7.30	16.12	26.08	8.32
1984	13.46	20.78	7.86	13.00	20.14	7.64	18.91	29.99	10.07
1985	13.33	19.84	8.24	13.27	19.61	8.35	16.07	25.87	8.53
1986	12.46	19.13	7.19	12.35	18.87	7.29	16.18	28.09	6.97
1987	13.20	20.53	7.51	13.10	20.16	7.66	16.81	30.00	6.99
1988	12.13	18.15	7.30	11.78	17.70	7.09	16.43	25.56	9.08
1989	12.12	18.30	7.26	11.84	17.71	7.30	15.75	27.16	7.05
1990	12.64	19.37	7.34	12.36	18.77	7.39	16.05	27.89	6.92
1991	12.17	18.36	7.25	12.08	18.12	7.30	14.41	23.71	7.32
1992	11.96	18.32	6.92	11.81	18.02	6.93	14.79	25.08	6.94
1993	12.43	18.71	7.29	12.23	18.41	7.21	15.54	24.85	8.10
1994	11.72	17.68	6.83	11.40	16.86	6.92	15.62	26.64	6.99
1995	11.54	16.95	7.19	11.52	16.72	7.33	13.63	22.80	6.66
1996	11.77	17.76	6.99	11.45	17.24	6.87	15.02	24.44	7.63
1997	11.52	17.35	6.77	11.53	17.19	6.87	11.49	18.32	6.20
1998	11.24	16.69	6.76	11.24	16.43	6.91	13.09	22.51	6.32
1999	10.57	15.55	6.46	10.47	15.41	6.35	11.74	19.78	5.82
2000	10.72	16.01	6.28	10.64	15.60	6.41	11.68	20.69	4.87
2001	10.77	15.40	6.89	10.84	15.48	6.90	11.87	18.60	6.90
2002	11.03	16.18	6.69	11.22	16.41	6.78	11.06	16.86	6.49
2003	10.40	15.45	6.12	10.35	15.43	5.95	11.56	16.69	7.50
2004	10.67	15.84	6.19	10.86	16.11	6.21	9.96	15.92	5.56
2005	10.50	15.28	6.43	10.62	15.61	6.27	10.82	16.13	6.87
2006	10.43	15.23	6.29	10.58	15.31	6.42	9.63	15.87	4.97
2007	10.35	15.27	6.08	10.59	15.58	6.13	9.36	14.83	5.26
1975-2007	11.95	18.01	7.04	11.91	17.91	7.06	13.55	22.04	7.02

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.7
Cancer of the Oral Cavity and Pharynx (Invasive)
Age-adjusted U.S. Death^a Rates by Year, Race and Sex

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	4.30	6.93	2.33	4.12	6.64	2.29	5.79	9.93	2.52
1976	4.22	6.89	2.22	4.03	6.55	2.17	6.08	10.55	2.62
1977	4.32	7.03	2.30	4.11	6.67	2.25	6.22	10.87	2.65
1978	4.19	6.78	2.26	3.99	6.41	2.21	6.15	10.69	2.68
1979	4.24	6.71	2.39	3.99	6.25	2.32	6.65	11.47	2.97
1980	4.16	6.69	2.27	3.87	6.12	2.22	6.97	12.48	2.76
1981	4.05	6.46	2.24	3.78	5.96	2.17	6.52	11.36	2.84
1982	4.02	6.46	2.22	3.74	5.96	2.13	6.62	11.46	2.94
1983	3.94	6.27	2.20	3.64	5.73	2.10	6.65	11.83	2.76
1984	3.88	6.18	2.17	3.61	5.64	2.12	6.37	11.70	2.38
1985	3.75	5.93	2.11	3.49	5.44	2.05	6.23	11.03	2.62
1986	3.72	5.80	2.16	3.42	5.27	2.07	6.51	11.35	2.93
1987	3.53	5.46	2.05	3.29	5.01	2.00	5.70	9.95	2.54
1988	3.59	5.63	2.05	3.33	5.14	1.98	5.99	10.67	2.55
1989	3.50	5.34	2.07	3.23	4.84	2.00	5.92	10.44	2.59
1990	3.58	5.61	2.03	3.29	5.07	1.96	6.12	11.05	2.52
1991	3.47	5.34	2.03	3.21	4.87	1.95	5.84	10.06	2.70
1992	3.34	5.15	1.94	3.09	4.66	1.89	5.56	9.97	2.31
1993	3.34	5.19	1.90	3.07	4.68	1.83	5.68	10.09	2.44
1994	3.15	4.84	1.83	2.92	4.41	1.77	5.33	9.26	2.39
1995	3.16	4.87	1.84	2.91	4.42	1.75	5.37	9.28	2.54
1996	3.03	4.64	1.75	2.82	4.24	1.71	4.86	8.69	2.07
1997	2.98	4.53	1.76	2.79	4.17	1.70	4.68	8.10	2.19
1998	2.96	4.53	1.72	2.80	4.20	1.68	4.53	7.91	2.09
1999	2.73	4.15	1.60	2.55	3.80	1.54	4.37	7.49	2.12
2000	2.69	4.06	1.58	2.52	3.72	1.55	4.12	7.31	1.76
2001	2.72	4.14	1.56	2.58	3.87	1.52	3.88	6.68	1.80
2002	2.67	4.07	1.54	2.56	3.86	1.50	3.67	6.30	1.73
2003	2.63	4.06	1.47	2.50	3.78	1.44	3.85	6.92	1.64
2004	2.60	3.99	1.47	2.48	3.71	1.45	3.84	6.91	1.63
2005	2.53	3.84	1.43	2.42	3.59	1.43	3.53	6.52	1.37
2006	2.47	3.78	1.39	2.39	3.60	1.37	3.27	5.70	1.50
2007	2.52	3.85	1.42	2.44	3.69	1.39	3.32	5.72	1.60
1975-2007	3.30	5.12	1.88	3.11	4.76	1.84	5.07	8.90	2.23

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.8
Cancer of the Oral Cavity and Pharynx (Invasive)
SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2003-2007									
All ages	10.4	15.4	6.1	10.5	15.7	6.1	10.2	16.1	5.8
Under 65	6.3	9.4	3.4	6.3	9.4	3.2	6.7	10.2	3.8
65 and over	38.7	57.6	24.7	40.0	59.4	25.5	34.4	56.5	19.5
All ages (IARC world std) ^c	7.4	11.1	4.2	7.5	11.2	4.2	7.7	12.0	4.3
Age-Specific Rates, 2003-2007									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	0.1	-	0.1	0.1	-	-	-	-	-
10-14	0.3	0.3	0.3	0.3	0.2	0.3	0.4	-	-
15-19	0.5	0.5	0.4	0.4	0.5	0.3	0.7	-	-
20-24	0.7	0.6	0.8	0.7	0.6	0.7	0.8	-	1.0
25-29	1.0	1.0	1.0	0.8	0.9	0.8	1.1	1.0	1.2
30-34	1.7	1.7	1.6	1.5	1.6	1.4	1.6	1.2	1.9
35-39	2.9	3.5	2.3	2.7	3.2	2.1	2.6	2.9	2.4
40-44	5.7	8.0	3.4	5.5	7.8	3.1	6.1	8.2	4.2
45-49	11.5	17.0	6.0	11.4	17.2	5.6	12.4	16.8	8.4
50-54	19.1	29.4	9.2	19.3	29.8	8.8	21.4	32.7	11.7
55-59	25.7	40.6	11.7	26.2	41.0	11.9	28.6	49.4	11.3
60-64	31.5	48.9	15.6	32.6	50.3	16.0	31.6	53.0	14.6
65-69	36.3	55.1	20.0	37.1	55.6	20.7	37.9	64.8	17.6
70-74	39.0	58.5	23.4	40.6	60.0	24.6	39.6	68.9	19.0
75-79	39.8	58.1	26.7	41.4	60.7	27.3	33.8	49.5	24.1
80-84	40.6	59.8	28.5	42.1	62.6	29.2	29.1	51.2	17.0
85+	38.8	57.8	29.7	40.2	60.7	30.5	23.2	31.2	19.9
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2003-2007									
All ages	2.5	3.9	1.4	2.4	3.7	1.4	3.6	6.3	1.5
Under 65	1.2	1.9	0.5	1.1	1.7	0.5	2.0	3.5	0.8
65 and over	12.0	18.0	7.7	11.9	17.5	7.9	14.0	25.8	6.5
All ages (IARC world std) ^c	1.7	2.6	0.9	1.6	2.4	0.8	2.5	4.5	1.0
Age-Specific Rates, 2003-2007									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.1	-	0.0	0.0	-	-	-	-
20-24	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	-
25-29	0.1	0.1	0.0	0.1	0.1	-	0.1	-	-
30-34	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.4	-
35-39	0.3	0.4	0.2	0.3	0.4	0.2	0.5	0.7	0.3
40-44	0.9	1.2	0.5	0.7	1.1	0.4	1.5	2.1	0.9
45-49	1.9	2.9	0.9	1.7	2.5	0.8	3.6	6.0	1.6
50-54	3.6	5.8	1.4	3.2	5.2	1.3	6.3	11.0	2.4
55-59	5.3	8.8	2.1	5.0	8.0	2.0	9.0	16.2	3.1
60-64	7.3	11.8	3.3	6.9	10.9	3.1	12.3	22.1	4.7
65-69	9.3	14.7	4.5	8.9	13.8	4.5	14.2	26.4	5.2
70-74	10.7	16.2	6.3	10.6	15.4	6.5	14.0	26.7	5.3
75-79	12.6	19.1	7.9	12.5	18.6	8.0	14.3	26.0	7.3
80-84	14.2	20.8	10.1	14.2	20.6	10.3	14.1	26.1	7.7
85+	17.4	24.0	14.4	17.9	24.2	14.9	13.0	22.2	9.3

^a SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

- Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.9
 Cancer of the Oral Cavity and Pharynx by Subsite (Invasive)
 SEER Incidence^a Stage Distribution by Site,
 Age-Adjusted SEER Incidence^a and U.S. Death^b Rates by Age, Race and Sex

	Site									
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth ^c	Oropharynx & Tonsil ^c	Hypophar. ^c	Salivary Gland	Nasophar. ^c	Other Oral Cavity & Pharynx ^c
<u>SEER Incidence</u>										
Stage Distribution, 2003-2007										
Percent of Total ^d										
Localized	33	88	35	40	-	-	-	43	-	-
Regional	44	4	44	48	-	-	-	32	-	-
Distant	15	1	15	5	-	-	-	17	-	-
Unstaged	7	7	6	6	-	-	-	8	-	-
Age-Adjusted Rates, 2003-2007										
Age at Diagnosis										
All ages	10.4	0.7	2.9	0.6	1.5	1.9	0.7	1.3	0.7	0.2
Under 65	6.3	0.3	1.8	0.3	0.7	1.5	0.3	0.7	0.5	0.1
65+	38.7	3.7	10.1	2.3	6.9	4.9	3.0	5.3	1.7	0.8
All ages(IARC world std) ^e	7.4	0.5	2.1	0.4	1.0	1.5	0.5	0.8	0.5	0.1
Sex										
Male	15.4	1.2	4.3	0.9	1.8	3.2	1.2	1.7	1.0	0.3
Female	6.1	0.3	1.7	0.3	1.2	0.8	0.3	1.0	0.4	0.1
Race										
White	10.5	0.8	3.1	0.6	1.5	2.0	0.6	1.3	0.4	0.2
Black	10.2	0.1	2.2	0.6	1.7	2.3	1.2	1.0	0.7	0.3
Other	8.8	0.4	2.0	0.3	1.3	0.8	0.4	1.1	2.4	0.1
<u>U.S. Mortality</u>										
Age-Adjusted Rates, 2003-2007										
Age at Death										
All ages	2.5	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Under 65	1.2	0.0	0.3	0.0	0.1	0.2	0.0	0.1	0.1	0.2
65+	12.0	0.1	2.8	0.2	2.1	1.7	0.5	1.3	0.8	2.6
All ages(IARC world std) ^e	1.7	0.0	0.4	0.0	0.2	0.3	0.1	0.1	0.1	0.4
Sex										
Male	3.9	0.0	0.9	0.1	0.5	0.7	0.2	0.4	0.3	0.9
Female	1.4	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
Race										
White	2.4	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Black	3.6	-	0.7	0.1	0.4	0.7	0.2	0.2	0.3	1.0
Other	2.0	-	0.4	-	0.2	0.2	0.1	0.2	0.8	0.2

^a SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^c Stage distribution was not calculated for this site due to inconsistent coding of stage over time.

^d Percents may not sum to 100 due to rounding.

^e Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.10
Cancer of the Oral Cavity and Pharynx (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	45	-	-	-	-	-
1970-1973 ^a	-	-	-	43	-	-	-	-	-
1975-1977 ^b	53.3	52.1	55.9	54.8	54.3	56.0	36.3	29.8	49.1
1978-1980 ^b	53.9	52.2	57.4	56.0	55.0	58.2	35.0	29.8	46.2
1981-1983 ^b	52.5	50.9	56.0	54.9	53.6	57.5	31.9	26.3	46.3
1984-1986 ^b	54.7	52.2	59.8	57.0	55.3	60.1	35.8	29.9	50.4
1987-1989 ^b	54.2	51.4	59.9	56.6	54.4	61.0	34.3	30.0	44.7
1990-1992 ^b	56.0	53.5	61.3	58.6	56.7	62.3	33.3	28.4	46.7
1993-1995 ^b	58.5	56.9	61.9	61.0	60.1	62.7	38.5	33.3	51.5
1996-1998 ^b	58.9	57.1	62.6	61.1	60.1	63.3	36.6	31.7	49.0
1999-2006 ^b	62.7 ^e	61.7 ^e	65.0 ^e	64.7 ^e	64.4 ^e	65.6 ^e	45.4 ^e	40.1 ^e	56.8
5-Year Period Survival (Percent) ^{cd}									
Year of Diagnosis:									
1999-2006	62.2	61.0	64.8	63.9	63.3	65.6	43.3	38.6	53.4
Stage Distribution (%) 1999-2006 ^c									
All Stages									
Number of cases	46,149	31,829	14,320	37,512	26,062	11,450	4,464	3,126	1,338
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	33	30	42	35	31	44	21	17	31
Regional	46	49	38	45	49	37	51	54	44
Distant	14	15	13	13	13	11	21	22	18
Unstaged	7	7	7	7	6	7	7	6	7
5-Year Relative Survival (Percent), 1999-2006 ^c									
Age at Diagnosis:									
Ages <45	77.3	74.0	83.1	79.6	77.0	84.7	62.0	52.6	75.3
Ages 45-54	64.9	63.3	70.1	68.5	67.3	73.0	40.1	37.2	47.7
Ages 55-64	60.2	58.8	64.4	62.5	61.3	66.0	38.0	35.7	46.2
Ages 65-74	54.7	53.8	56.6	56.3	56.1	56.8	35.3	29.9	48.1
Ages 75+	49.1	48.2	49.9	50.2	49.5	50.9	36.8	30.0	43.4
Ages <65	65.4	63.2	71.4	67.9	66.2	73.0	44.0	39.3	55.8
Ages 65+	52.5	51.9	53.4	53.9	53.9	53.9	36.2	30.3	46.2
Stage:									
All Stages	60.9	59.8	63.6	62.8	62.2	64.1	42.2	37.5	53.2
Localized	82.5	81.7	83.8	83.0	82.6	83.7	74.0	66.4	83.6
Regional	54.7	55.8	51.7	56.8	58.6	51.3	36.7	34.7	42.4
Distant	32.2	31.3	34.7	32.2	31.5	34.0	24.0	22.6	27.8
Unstaged	53.2	51.9	55.8	53.7	52.5	55.7	37.2	32.7	46.6 ^f

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2007.

^c Based on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006. The remaining 13 SEER Areas contribute cases for the entire period 1999-2006. Based on follow-up of patients into 2007.

^d Period survival provides a more up-to-date estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2004-2006: 0-1 year survival),

(2003-2005: 1-2 year survival), (2002-2004: 2-3 year survival), (2001-2003: 3-4 year survival), (2000-2002: 4-5 years survival).

^e The difference between 1975-1977 and 1999-2006 is statistically significant ($p < .05$).

^f The standard error is between 5 and 10 percentage points.

^g The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 20.11
Cancer of the Oral Cavity and Pharynx by Subsite (Invasive)

SEER^a Relative Survival (Percent) by Cancer Site, 1999-2006

Site	Number of Cases	Case Distribution (%)	Survival Time				
			1-Year Percent	2-Year Percent	3-Year Percent	4-Year Percent	5-Year Percent
Oral Cavity & Pharynx	46149	100	83.0	72.3	67.0	63.6	60.9
Lip	3674	8	98.5	95.6	93.9	91.4	90.4
Tongue	12343	27	82.3	69.7	64.4	61.4	59.4
Gum & Other Mouth	6350	14	81.8	71.6	66.5	62.9	59.6
Floor of Mouth	2789	6	80.1	67.0	60.1	56.7	53.1
Oropharynx & Tonsil	8577	19	83.5	73.1	68.3	64.5	62.2
Hypopharynx	2955	6	66.5	48.1	38.8	33.7	29.4
Salivary Gland	5318	12	89.3	82.0	77.7	75.7	73.7
Nasopharynx	3282	7	83.3	73.1	66.3	61.8	57.6
Other Oral Cavity & Pharynx	861	2	60.3	47.3	41.0	37.1	34.5

5-Year Relative Survival (Percent), 1999-2006

SITE	Stage					All Stages			
	All Stages	Localized	Regional	Distant	Unstaged	White Male	White Female	Black Male	Black Female
Oral Cavity & Pharynx	60.9	82.5	54.7	32.2	53.2	62.2	64.1	37.5	53.2
Lip	90.4	93.1	52.6 ^b	43.5 ^b	83.5	90.0	91.7	90.8 ^b	-
Tongue	59.4	77.3	55.2	29.5	53.2	61.9	61.7	31.1	36.9
Gum & Other Mouth ^d	59.6	-	-	-	-	57.3	63.8	44.8	65.5
Floor of Mouth	53.1	76.0	38.9	15.3	42.8 ^b	52.6	58.7	36.7	58.4 ^b
Oropharynx & Tonsil ^d	62.2	-	-	-	-	66.8	60.1	36.9	38.1
Hypopharynx ^d	29.4	-	-	-	-	30.9	30.7	19.8	27.3 ^b
Salivary Gland	73.7	94.3	60.2	40.1	53.9	67.2	80.2	65.4	79.3
Nasopharynx ^d	57.6	-	-	-	-	54.3	48.9	49.4	56.1 ^b
Other Oral Cavity & Pharynx ^d	34.5	-	-	-	-	41.0	30.0	19.9	20.3 ^b

^a SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006. The remaining 13 SEER Areas contribute cases for the entire period 1999-2006. Based on follow-up of patients into 2007.

^b The standard error is between 5 and 10 percentage points.

^c The standard error is greater than 10 percentage points.

^d Survival by stage was not calculated for this site due to inconsistent coding of stage over time.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 20.12
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Survival Time	Year of Diagnosis																			
	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1-year	80.3	80.1	81.3	82.1	81.9	80.4	82.0	83.7	83.5	82.3	84.3	81.6	84.3	85.3	83.5	84.3	84.6	84.9	83.9	85.6
2-year	66.5	66.5	68.2	70.1	69.6	69.3	69.0	72.3	72.2	70.5	71.6	70.7	72.9	73.9	73.7	73.4	75.3	75.8	74.6	
3-year	60.3	60.1	61.5	63.5	63.1	62.1	63.1	66.7	66.1	64.3	66.7	65.0	66.1	69.0	67.8	68.1	70.5	71.0		
4-year	56.4	56.1	57.7	60.3	58.5	57.6	59.0	62.5	62.5	60.8	62.9	60.9	62.8	65.3	63.4	64.9	67.8			
5-year	53.5	53.1	54.6	57.5	55.2	55.4	56.3	59.8	59.7	58.9	59.6	58.1	59.9	62.5	61.0	62.8				
6-year	51.1	50.5	52.2	55.4	52.6	53.0	54.2	57.1	57.3	56.7	57.3	57.0	57.2	60.6	59.4					
7-year	49.0	48.4	49.7	53.2	50.6	50.4	51.9	56.1	54.9	55.2	55.9	55.3	54.9	58.6						
8-year	46.9	46.9	47.8	51.6	49.3	48.4	50.0	53.1	52.9	53.1	54.9	54.5	53.2							
9-year	45.2	45.1	46.0	48.9	47.8	46.6	47.9	50.7	51.1	51.9	53.7	54.2								
10-year	43.2	43.5	44.5	47.2	46.2	45.3	46.8	48.7	49.8	50.0	52.2									
11-year	41.5	42.1	43.3	46.1	44.2	43.2	45.2	47.1	48.2	48.9										
12-year	40.1	40.8	42.0	45.2	42.3	42.1	44.7	46.1	46.5											
13-year	39.0	39.2	40.6	43.3	41.7	40.7	43.6	44.5												
14-year	38.1	38.4	39.5	42.1	41.1	39.3	42.8													
15-year	36.8	36.9	38.7	41.6	40.6	38.3														
16-year	35.6	35.9	37.8	41.4	38.9															
17-year	35.0	35.1	37.1	40.7																
18-year	34.1	34.3	36.0																	
19-year	33.6	32.9																		
20-year	32.7	32.6																		

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.13
Cancer of the Oral Cavity and Pharynx For Selected Subsites (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Survival Time																				
<u>Cancer of the Tongue</u>																				
1-year	75.4	74.4	77.9	80.3	82.2	77.2	81.9	82.0	80.3	80.0	82.6	80.3	82.1	85.5	82.4	82.1	85.3	87.3	85.1	84.9
2-year	55.6	58.0	60.9	64.5	67.2	60.5	65.7	68.7	65.9	67.2	71.5	66.5	68.7	72.1	71.6	69.5	71.9	75.9	72.6	
3-year	48.1	51.4	55.0	58.5	59.2	51.1	57.5	63.2	59.3	61.4	65.8	59.9	61.0	66.9	65.1	64.1	67.4	70.9		
4-year	44.4	48.1	50.7	55.7	53.9	47.3	54.6	58.9	57.3	57.7	62.8	56.4	58.9	64.1	62.2	61.7	65.2			
5-year	41.1	45.5	48.1	52.7	53.1	44.5	52.3	55.1	55.3	56.1	59.1	53.9	56.1	63.0	59.8	60.2				
6-year	39.4	42.7	45.9	50.5	49.6	43.2	50.6	53.0	51.9	53.9	57.8	53.6	54.4	61.4	58.7					
7-year	38.4	40.1	43.2	47.9	48.0	41.7	47.9	52.5	50.1	52.8	57.0	51.0	52.1	59.4						
8-year	37.0	38.5	41.3	45.8	47.3	40.3	45.7	49.1	48.1	51.2	56.0	49.7	52.1							
9-year	35.9	35.8	39.8	42.8	45.8	36.5	43.5	47.2	46.5	50.3	55.4	49.3								
10-year	34.1	34.4	38.8	40.9	43.1	34.2	43.2	46.0	45.4	48.3	55.1									
<u>Cancer of the Lip</u>																				
1-year	99.5	98.1	99.5	99.0	100.0	100.0	99.2	100.0	99.9	98.5	100.0	99.4	97.6	98.0	95.0	99.6	99.3	99.7	98.0	96.6
2-year	97.7	96.4	98.1	97.7	98.2	98.3	98.4	100.0	99.7	94.4	97.1	98.0	95.5	95.9	94.0	99.6	99.3	99.7	95.2	
3-year	97.3	94.1	97.1	96.2	98.2	96.6	98.3	100.0	99.0	93.2	95.0	95.7	94.1	94.8	94.0	96.9	97.7	98.4		
4-year	96.0	93.0	96.7	96.2	97.2	94.9	98.3	98.3	96.2	92.4	93.5	93.9	92.3	91.7	91.3	96.3	97.7			
5-year	94.6	91.0	95.8	94.7	94.8	94.4	96.5	97.8	95.1	90.2	91.4	91.5	90.8	89.2	90.4	93.1				
6-year	92.7	89.1	94.9	92.8	94.8	91.1	96.0	97.6	95.1	89.3	90.0	90.2	89.8	88.9	87.9					
7-year	91.4	88.0	92.9	92.1	94.8	88.3	94.6	97.6	95.1	89.1	89.1	90.1	89.4	88.6						
8-year	90.2	88.0	91.6	92.1	94.8	86.1	91.9	96.7	91.0	86.1	89.1	87.3	89.4							
9-year	88.2	87.4	90.9	90.0	93.0	85.0	90.7	94.8	86.5	85.8	89.1	87.2								
10-year	86.4	86.3	90.7	89.3	91.1	83.5	89.1	91.8	82.2	85.8	88.0									
<u>Cancer of the Oropharynx and Tonsil</u>																				
1-year	71.4	72.3	74.0	76.7	76.8	71.4	77.6	74.6	81.1	80.4	81.8	81.6	87.5	82.8	84.1	85.8	82.7	84.4	84.2	85.4
2-year	54.3	53.3	56.9	60.5	62.9	58.4	64.6	63.6	70.3	66.8	67.2	67.1	75.5	67.7	72.6	76.8	76.0	75.1	74.4	
3-year	44.9	45.0	46.5	51.7	57.6	49.7	55.5	57.6	63.2	60.6	62.1	60.4	67.9	62.6	67.6	72.3	71.6	71.6		
4-year	39.5	40.0	42.3	48.0	53.2	44.9	49.7	53.4	59.0	54.3	56.7	55.5	63.6	58.0	61.1	68.3	68.8			
5-year	36.3	36.1	38.8	43.3	46.5	41.6	46.3	50.2	55.0	53.2	52.4	53.7	61.0	54.4	59.8	65.4				
6-year	32.9	33.0	35.8	43.0	41.7	40.6	44.3	47.2	51.5	48.8	49.3	52.7	58.0	53.5	56.2					
7-year	31.1	30.5	33.2	41.0	40.2	39.4	43.4	46.7	48.2	44.8	48.6	51.4	56.1	50.0						
8-year	27.4	29.0	31.6	39.7	37.7	38.4	41.6	43.3	47.4	43.7	48.0	51.0	52.6							
9-year	24.7	26.8	29.8	36.0	35.9	36.8	38.9	42.2	46.3	42.9	46.1	50.8								
10-year	23.6	24.4	27.8	35.9	34.1	36.8	35.7	41.3	45.5	42.0	45.4									

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.14
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Survival Time																				
1-year	79.8	79.6	80.6	81.3	81.4	79.7	80.9	83.9	83.4	82.1	83.5	81.2	84.7	85.1	84.0	84.4	84.9	85.5	84.3	85.6
2-year	65.6	65.6	66.7	68.0	68.6	67.9	67.4	72.5	71.3	69.9	70.1	70.6	71.9	73.3	73.7	72.1	75.0	75.7	74.9	
3-year	59.4	58.7	59.4	61.5	61.3	60.1	60.7	65.4	65.4	63.1	65.1	64.3	64.5	67.7	68.1	65.8	70.0	70.1		
4-year	55.0	54.6	55.4	58.0	55.2	55.9	57.0	60.9	61.2	59.4	60.6	59.8	60.8	64.1	63.1	62.8	67.1			
5-year	52.1	51.3	51.8	55.1	51.7	53.6	54.1	58.4	58.4	57.4	57.2	56.8	58.1	61.1	60.5	61.1				
6-year	49.7	48.7	49.7	52.9	49.3	51.5	51.7	56.1	55.7	54.6	54.8	55.8	55.2	58.9	58.7					
7-year	47.6	46.6	47.4	50.5	47.0	48.5	48.9	55.2	52.8	52.5	53.6	53.8	53.2	56.7						
8-year	45.6	45.1	45.2	49.3	45.7	46.4	47.8	52.4	50.6	50.6	52.6	52.5	51.6							
9-year	43.7	43.4	43.4	46.7	44.3	44.6	45.5	49.8	48.7	49.7	51.2	52.0								
10-year	41.7	41.6	41.5	45.7	42.3	43.2	44.7	47.8	47.1	47.7	49.9									
11-year	39.9	40.1	40.4	44.6	40.5	41.5	43.3	46.4	45.2	46.2										
12-year	38.7	38.9	39.1	43.9	38.2	40.3	42.7	45.4	43.5											
13-year	37.7	37.5	37.8	41.9	37.9	39.0	41.2	43.8												
14-year	36.8	36.7	36.7	40.5	37.6	37.6	40.6													
15-year	35.6	35.3	35.9	39.9	37.1	36.3														
16-year	34.4	34.3	35.1	39.3	34.9															
17-year	33.6	33.4	34.3	38.7																
18-year	32.9	32.5	33.3																	
19-year	32.5	30.8																		
20-year	31.7	30.3																		

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.15
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Survival Time																				
1-year	81.7	81.2	82.8	83.9	82.8	81.9	84.5	83.4	83.6	82.6	86.2	82.4	83.4	85.8	82.4	83.9	83.9	83.6	82.9	85.6
2-year	68.5	68.4	71.2	74.7	71.7	72.2	72.5	71.9	74.0	71.8	75.1	70.9	75.0	75.2	73.4	76.1	76.0	76.2	74.0	
3-year	62.2	63.1	65.9	67.8	66.9	66.3	68.2	69.3	67.5	66.7	70.3	66.5	69.5	71.9	67.3	72.9	71.7	73.3		
4-year	59.4	59.2	62.6	65.1	65.0	61.1	63.5	65.9	64.9	63.8	68.0	63.3	67.0	67.9	64.1	69.4	69.3			
5-year	56.5	56.7	60.3	62.5	62.1	59.2	60.6	62.6	62.0	61.8	65.1	60.7	63.5	65.4	61.9	66.4				
6-year	54.1	54.0	57.3	60.7	59.3	56.3	59.5	59.2	60.4	60.8	62.9	59.6	61.6	64.5	60.9					
7-year	52.2	51.9	54.2	58.5	57.9	54.6	58.3	58.0	58.8	60.5	60.8	58.7	58.6	62.9						
8-year	49.8	50.6	52.9	56.3	56.4	52.8	54.7	54.6	57.2	58.1	59.8	58.4	56.8							
9-year	48.2	48.5	51.2	53.7	54.8	50.9	53.0	52.6	55.7	56.3	59.4	58.4								
10-year	46.4	47.3	50.3	50.3	54.0	49.6	51.3	50.8	54.6	54.5	57.4									
11-year	44.5	46.1	49.1	49.2	51.4	46.6	49.5	48.2	53.5	54.2										
12-year	43.1	44.5	47.5	47.9	50.3	45.4	49.3	47.6	52.1											
13-year	41.7	42.4	46.1	46.3	49.1	44.4	48.9	45.8												
14-year	40.5	41.5	44.9	45.3	47.7	43.1	47.6													
15-year	39.0	39.8	44.0	45.0	47.4	42.2														
16-year	38.1	38.8	42.9	45.0	46.5															
17-year	37.4	38.1	42.5	44.6																
18-year	36.3	37.5	41.1																	
19-year	35.5	36.8																		
20-year	34.4	36.6																		

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.16
Cancer of the Oral Cavity and Pharynx (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Both Sexes, 2005-2007 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.01	0.01	1.02	0.28	Asian/ Pacific Islander	0	0.00	0.01	0.02	0.85	0.30
	10	0.00	0.01	0.04	1.04	0.28		10	0.00	0.02	0.05	0.86	0.30
	20	0.01	0.03	0.12	1.04	0.28		20	0.01	0.05	0.13	0.86	0.30
	30	0.02	0.11	0.31	1.04	0.28		30	0.04	0.12	0.26	0.85	0.30
	40	0.09	0.29	0.57	1.03	0.29		40	0.08	0.22	0.42	0.81	0.30
	50	0.21	0.49	0.76	0.97	0.28		50	0.14	0.34	0.53	0.74	0.29
	60	0.30	0.58	0.76	0.81	0.25		60	0.21	0.40	0.56	0.62	0.26
	70	0.32	0.52	-	0.58	0.20		70	0.21	0.39	-	0.45	0.22
80	0.28	-	-	0.35	0.15	80	0.21	-	-	0.29	0.18		
White	0	0.00	0.00	0.01	1.05	0.27	American Indian/ Alaska Native ^a	0	0.00	0.00	0.01	0.66	0.25
	10	0.00	0.01	0.03	1.06	0.28		10	0.00	0.01	0.02	0.67	0.26
	20	0.01	0.03	0.11	1.06	0.28		20	0.00	0.02	0.07	0.67	0.26
	30	0.02	0.11	0.31	1.06	0.28		30	0.01	0.07	0.23	0.68	0.27
	40	0.08	0.29	0.58	1.06	0.28		40	0.06	0.22	0.45	0.69	0.27
	50	0.21	0.51	0.78	1.00	0.28		50	0.17	0.41	0.54	0.66	0.27
	60	0.31	0.60	0.78	0.83	0.25		60	0.26	0.39	0.52	0.52	0.28
	70	0.33	0.54	-	0.59	0.20		70	0.16	0.30	-	0.31	0.23
80	0.29	-	-	0.36	0.15	80	0.20	-	-	0.21	0.17		
Black	0	0.00	0.01	0.02	0.79	0.31	Hispanic ^b	0	0.00	0.00	0.01	0.67	0.20
	10	0.01	0.02	0.04	0.81	0.31		10	0.00	0.01	0.02	0.68	0.20
	20	0.01	0.03	0.11	0.81	0.31		20	0.01	0.02	0.06	0.67	0.20
	30	0.02	0.11	0.30	0.81	0.32		30	0.01	0.05	0.16	0.68	0.20
	40	0.09	0.28	0.53	0.81	0.32		40	0.04	0.15	0.31	0.67	0.21
	50	0.21	0.47	0.67	0.76	0.31		50	0.11	0.27	0.45	0.64	0.20
	60	0.29	0.52	0.60	0.62	0.27		60	0.17	0.36	0.51	0.56	0.19
	70	0.28	0.38	-	0.40	0.19		70	0.21	0.37	-	0.43	0.16
80	0.16	-	-	0.19	0.12	80	0.22	-	-	0.29	0.12		

Devcan Version 6.5.0, June 2010, National Cancer Institute (<http://srab.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 20.17
Cancer of the Oral Cavity and Pharynx (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Males, 2005-2007 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.01	1.41	0.38	Asian/ Pacific Islander	0	0.00	0.01	0.02	1.11	0.39
	10	0.00	0.01	0.04	1.43	0.38		10	0.01	0.02	0.06	1.12	0.40
	20	0.01	0.04	0.16	1.43	0.39		20	0.01	0.05	0.16	1.11	0.40
	30	0.03	0.15	0.46	1.44	0.39		30	0.04	0.15	0.35	1.11	0.40
	40	0.12	0.44	0.85	1.44	0.39		40	0.11	0.31	0.61	1.08	0.40
	50	0.32	0.75	1.11	1.36	0.39		50	0.20	0.51	0.76	0.98	0.38
	60	0.46	0.85	1.07	1.12	0.35		60	0.32	0.59	0.76	0.81	0.34
	70	0.46	0.72	-	0.79	0.27		70	0.30	0.48	-	0.55	0.28
80	0.39	-	-	0.48	0.19	80	0.24	-	-	0.32	0.21		
White	0	0.00	0.00	0.01	1.45	0.37	American Indian/ Alaska Native ^a	0	0.00	0.00	0.01	0.77	0.32
	10	0.00	0.01	0.04	1.47	0.37		10	0.00	0.01	0.03	0.79	0.32
	20	0.01	0.03	0.16	1.47	0.37		20	0.01	0.03	0.10	0.80	0.33
	30	0.03	0.15	0.46	1.49	0.38		30	0.02	0.09	0.36	0.81	0.34
	40	0.13	0.45	0.86	1.48	0.38		40	0.07	0.35	0.63	0.81	0.35
	50	0.33	0.76	1.14	1.40	0.38		50	0.29	0.59	0.73	0.78	0.36
	60	0.47	0.87	1.10	1.16	0.34		60	0.33	0.48	0.54	0.54	0.36
	70	0.48	0.75	-	0.81	0.27		70	0.18	0.25	-	0.25	0.29
80	0.40	-	-	0.50	0.19	80	0.10	-	-	0.10	0.16		
Black	0	0.00	0.01	0.01	1.12	0.47	Hispanic ^b	0	0.00	0.00	0.01	0.89	0.28
	10	0.01	0.01	0.03	1.15	0.48		10	0.00	0.01	0.02	0.90	0.28
	20	0.01	0.03	0.14	1.15	0.49		20	0.00	0.02	0.07	0.90	0.29
	30	0.02	0.13	0.43	1.17	0.50		30	0.01	0.07	0.22	0.91	0.29
	40	0.11	0.42	0.82	1.18	0.51		40	0.05	0.21	0.45	0.91	0.29
	50	0.33	0.75	1.03	1.14	0.50		50	0.16	0.41	0.65	0.88	0.29
	60	0.48	0.81	0.92	0.93	0.44		60	0.26	0.52	0.71	0.77	0.27
	70	0.44	0.58	-	0.59	0.31		70	0.30	0.51	-	0.58	0.22
80	0.25	-	-	0.27	0.18	80	0.29	-	-	0.39	0.15		

Devcan Version 6.5.0, June 2010, National Cancer Institute (<http://srab.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 20.18
Cancer of the Oral Cavity and Pharynx (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Females, 2005-2007 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.01	0.01	0.66	0.18	Asian/ Pacific Islander	0	0.00	0.00	0.02	0.63	0.22
	10	0.00	0.01	0.03	0.66	0.19		10	0.00	0.02	0.05	0.63	0.22
	20	0.01	0.03	0.08	0.66	0.19		20	0.01	0.05	0.10	0.63	0.22
	30	0.02	0.07	0.16	0.66	0.19		30	0.03	0.09	0.17	0.62	0.22
	40	0.05	0.14	0.29	0.64	0.19		40	0.06	0.14	0.25	0.59	0.22
	50	0.10	0.25	0.43	0.61	0.18		50	0.09	0.19	0.33	0.54	0.21
	60	0.16	0.35	0.49	0.53	0.17		60	0.11	0.25	0.40	0.46	0.20
	70	0.21	0.36	-	0.42	0.15		70	0.15	0.31	-	0.37	0.18
80	0.20	-	-	0.27	0.12	80	0.18	-	-	0.26	0.15		
White	0	0.00	0.01	0.01	0.67	0.18	American Indian/ Alaska Native ^a	0	0.00	0.00	0.01	0.55	0.19
	10	0.00	0.01	0.03	0.67	0.19		10	0.00	0.01	0.01	0.55	0.19
	20	0.01	0.03	0.07	0.67	0.19		20	0.00	0.00	0.05	0.55	0.19
	30	0.02	0.06	0.16	0.67	0.19		30	0.00	0.05	0.10	0.56	0.20
	40	0.04	0.14	0.29	0.65	0.19		40	0.05	0.10	0.28	0.56	0.20
	50	0.10	0.26	0.44	0.62	0.18		50	0.06	0.25	0.36	0.53	0.19
	60	0.16	0.36	0.50	0.55	0.18		60	0.20	0.31	0.50	0.50	0.20
	70	0.22	0.37	-	0.43	0.16		70	0.13	0.34	-	0.35	0.17
80	0.21	-	-	0.28	0.12	80	0.28	-	-	0.29	0.17		
Black	0	0.00	0.01	0.02	0.50	0.16	Hispanic ^b	0	0.00	0.00	0.01	0.47	0.13
	10	0.00	0.02	0.04	0.50	0.16		10	0.00	0.01	0.02	0.47	0.13
	20	0.01	0.03	0.09	0.50	0.16		20	0.01	0.02	0.04	0.47	0.13
	30	0.02	0.08	0.18	0.49	0.16		30	0.01	0.04	0.10	0.46	0.13
	40	0.06	0.16	0.28	0.48	0.16		40	0.02	0.08	0.17	0.46	0.13
	50	0.10	0.23	0.36	0.43	0.16		50	0.06	0.15	0.27	0.44	0.13
	60	0.14	0.28	0.34	0.36	0.14		60	0.09	0.22	0.34	0.39	0.12
	70	0.17	0.24	-	0.26	0.11		70	0.14	0.27	-	0.32	0.12
80	0.10	-	-	0.14	0.09	80	0.16	-	-	0.23	0.10		

Devcan Version 6.5.0, June 2010, National Cancer Institute (<http://srab.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 20.19
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER Incidence and U.S. Mortality
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 17 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2003-2007			Trend 1998-2007 ^c			Trend 1998-2007 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	10.4	15.4	6.1	-1.3*	-1.5*	-1.2*	-1.1*	-1.2*	-1.0*
White	10.5	15.7	6.1	-1.1*	-1.2*	-1.3*	-0.9*	-1.1*	-0.9*
White Hispanic ^e	6.0	8.8	3.7	-2.2*	-2.7*	-1.7*	-	-	-
White Non-Hispanic ^e	11.3	16.9	6.5	-0.8*	-0.9*	-1.1*	-	-	-
Black	10.2	16.1	5.8	-2.8*	-3.4*	-1.4*	-2.6*	-3.3*	-1.5*
Asian/Pacific Islander	7.6	10.5	5.3	-1.3*	-1.6*	-0.8	-	-	-
Amer Ind/Alaska Nat ^f	7.3	9.6	5.2	-3.9*	-	-	-	-	-
Hispanic ^e	5.9	8.7	3.6	-2.1*	-2.5*	-1.7*	-	-	-
<u>U.S. Mortality^g</u>									
	Rate 2003-2007			Trend 1998-2007 ^h					
	Rate per 100,000 persons			AAPC (%)					
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females			
All Races	2.5	3.9	1.4	-1.6*	-1.6*	-2.3*			
White	2.4	3.7	1.4	-1.7*	-1.2*	-2.1*			
White Hispanic ^e	1.6	2.5	0.8	-3.0*	-3.8*	-1.6*			
White Non-Hispanic ^e	2.5	3.8	1.5	-1.1*	-0.9*	-1.9*			
Black	3.6	6.3	1.5	-3.7*	-3.7*	-3.7*			
Asian/Pacific Islander	2.1	3.1	1.2	-2.6*	-2.8*	-1.8*			
Amer Ind/Alaska Nat									
Total U.S.	1.9	2.9	1.2	-1.7*	-2.4*	-			
CHSDA Counties	2.4	3.5	1.6	-1.9*	-	-			
Non-CHSDA Counties	1.3	2.1	0.7	-	-	-			
Hispanic ^e	1.5	2.5	0.8	-3.0*	-3.9*	-1.4*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends

are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

c The 1998-2007 AAPC estimates are based on a Joinpoint analysis with up to 2 Joinpoints over diagnosis years 1992-2007.

d The 1998-2007 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1975-2007.

e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2003-2007 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1998-2007 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

f Incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

g US Mortality Files, National Center for Health Statistics, CDC.

h The 1998-2007 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2007.

* The APC is significantly different from zero (p<.05).

Table 20.20
Cancer of the Oral Cavity and Pharynx by Subsite (Invasive)

SEER Incidence
Age-Adjusted Rates and Trends^a by Race and Sex

	Site									
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth	Oropharynx & Tonsil	Hypophar.	Salivary Gland	Nasophar.	Other Oral Cavity & Pharynx
<u>2003-2007, Rate per 100,000 persons^b</u>										
All Races										
Male and Female	10.4	0.7	2.9	0.6	1.5	1.9	0.7	1.3	0.7	0.2
Male	15.4	1.2	4.3	0.9	1.8	3.2	1.2	1.7	1.0	0.3
Female	6.1	0.3	1.7	0.3	1.2	0.8	0.3	1.0	0.4	0.1
White										
Male and Female	10.5	0.8	3.1	0.6	1.5	2.0	0.6	1.3	0.4	0.2
Male	15.7	1.4	4.5	0.9	1.7	3.3	1.1	1.7	0.6	0.3
Female	6.1	0.4	1.7	0.4	1.2	0.8	0.3	1.0	0.2	0.1
Black										
Male and Female	10.2	0.1	2.2	0.6	1.7	2.3	1.2	1.0	0.7	0.3
Male	16.1	0.1	3.6	1.0	2.1	4.1	2.3	1.1	1.2	0.5
Female	5.8	-	1.2	0.3	1.3	0.9	0.4	1.0	0.4	0.2
<u>Trend 1998-2007^c, APC(%)</u>										
All Races										
Male and Female	-1.1*	-6.3*	1.2*	-6.2*	-2.5*	1.6*	-4.8*	0.5	-0.2	-5.3*
Male	-1.3*	-7.0*	1.5*	-6.1*	-2.9*	1.7*	-4.7*	0.3	-0.3	-6.3*
Female	-1.1*	-4.3*	0.6	-6.8*	-2.1*	0.5	-5.1*	0.6	-0.1	-4.0*
White										
Male and Female	-0.8*	-6.2*	1.7*	-5.9*	-2.6*	2.6*	-4.5*	0.5	0.4	-6.0*
Male	-0.9*	-6.9*	1.9*	-5.7*	-2.4*	2.6*	-4.4*	0.5	0.4	-6.9*
Female	-1.2*	-4.1*	1.3	-6.7*	-2.8*	1.1	-4.9*	0.1	-0.3	-5.0*
Black										
Male and Female	-3.1*	-	-2.9*	-9.7*	-3.9	-2.6*	-3.1	0.6	-0.3	-
Male	-4.1*	-	-3.3*	-11.0*	-7.2*	-2.3	-3.3	-3.5	-	-
Female	-1.2	-	-1.8	-	0.5	-3.3	-	4.3	-	-

The APC is the Annual Percent Change over the time interval.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Incidence data used in calculating the rates are from the 17 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

^c Incidence data used in calculating the trends are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

* The APC is significantly different from zero ($p < .05$).

Table 20.21
Cancer of the Oral Cavity and Pharynx by Subsite

U.S. Mortality^a
Age-Adjusted Rates and Trends^b by Race and Sex

	Site									
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth	Oropharynx & Tonsil	Hypophar.	Salivary Gland	Nasophar.	Other Oral Cavity & Pharynx
<u>2003-2007, Rate per 100,000 persons</u>										
All Races										
Male and Female	2.5	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Male	3.9	0.0	0.9	0.1	0.5	0.7	0.2	0.4	0.3	0.9
Female	1.4	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
White										
Male and Female	2.4	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Male	3.7	0.0	0.9	0.1	0.5	0.6	0.2	0.4	0.2	0.8
Female	1.4	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
Black										
Male and Female	3.6	-	0.7	0.1	0.4	0.7	0.2	0.2	0.3	1.0
Male	6.3	-	1.2	0.1	0.7	1.3	0.4	0.2	0.5	1.9
Female	1.5	-	0.3	-	0.2	0.3	0.0	0.1	0.1	0.4
<u>Trend 1998-2007, APC(%)</u>										
All Races										
Male and Female	-1.6*	-4.5*	-0.4*	-8.0*	-3.7*	0.3	-4.5*	-1.0*	-2.2*	-1.5*
Male	-1.5*	-5.1*	-0.4	-7.6*	-3.8*	0.4	-4.1*	-0.7	-2.2*	-1.7*
Female	-2.1*	-2.9	-0.7*	-9.1*	-3.7*	-0.5	-6.7*	-2.0*	-2.4*	-1.6*
White										
Male and Female	-1.3*	-4.5*	0.1	-7.7*	-3.5*	0.9	-4.4*	-1.0*	-2.5*	-1.0*
Male	-1.1*	-5.1*	0.2	-7.4*	-3.4*	1.2	-4.2*	-0.8	-2.7*	-1.2*
Female	-1.9*	-2.6	-0.4	-8.5*	-3.6*	-0.4	-6.2*	-1.8*	-2.5*	-1.3*
Black										
Male and Female	-3.3*	-	-3.4*	-9.9*	-5.4*	-2.2*	-4.3*	-2.3	-2.6	-2.8*
Male	-3.1*	-	-3.5*	-9.1*	-6.4*	-2.2*	-2.7	0.6	-0.8	-2.7*
Female	-3.8*	-	-2.2	-	-4.2*	-1.5	-	-5.7*	-5.6*	-3.4*

^a The APC is the Annual Percent Change over the time interval.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

* The APC is significantly different from zero (p<.05).

Table 20.22
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted SEER Incidence Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2003-2007</u>									
Atlanta & Rural Georgia	9.65	14.48	5.74	9.85	14.66	5.65	9.19	14.62	5.52
Atlanta	9.55	14.30	5.70	9.67	14.30	5.63	9.29	15.06	5.43
Rural Georgia	11.74	18.39	6.19	13.53	21.88	-	8.39	-	-
California	10.03	14.71	6.01	10.32	15.26	6.02	9.37	13.95	5.70
Greater Bay Area	10.19	14.44	6.51	10.50	14.95	6.57	8.96	12.83	5.81
San Francisco-Oakland	10.63	14.93	6.94	10.97	15.31	7.12	8.92	12.59	6.03
San Jose-Monterey	9.35	13.54	5.68	9.69	14.34	5.62	10.11	15.18	-
Los Angeles	8.52	12.44	5.28	8.57	12.58	5.19	9.77	15.02	5.89
Greater California	10.71	15.91	6.19	11.01	16.48	6.20	9.23	13.55	5.42
Connecticut	10.53	15.81	6.02	10.28	15.30	5.93	12.78	21.62	6.40
Detroit	11.48	17.26	6.78	11.40	17.18	6.60	12.03	18.33	7.37
Hawaii	11.54	16.48	6.99	17.08	24.41	9.43	-	-	-
Iowa	11.20	17.03	6.25	10.94	16.61	6.12	12.22	20.20	-
Kentucky	12.11	18.88	6.43	12.03	18.79	6.34	11.08	17.11	6.31
Louisiana	12.17	19.26	6.23	12.30	19.10	6.39	11.84	20.24	5.58
New Jersey	9.90	14.66	5.95	9.90	14.66	5.90	9.79	15.65	5.65
New Mexico	9.33	14.16	5.05	9.89	15.02	5.28	-	-	-
Seattle-Puget Sound	10.86	15.61	6.60	11.24	16.10	6.81	7.19	11.87	-
Utah	7.64	10.96	4.62	7.76	11.19	4.61	-	-	-
9 SEER Areas ^b	10.47	15.41	6.22	10.60	15.61	6.20	10.22	15.85	6.00
11 SEER Areas ^b	9.97	14.64	5.97	10.12	14.90	5.95	10.09	15.59	5.95
13 SEER Areas ^b	9.98	14.67	5.99	10.13	14.92	5.95	10.07	15.52	5.96
17 SEER Areas ^b	10.38	15.45	6.07	10.55	15.73	6.05	10.24	16.08	5.82

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.23
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted SEER Death Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates^a, 2003-2007</u>									
Atlanta & Rural Georgia	2.30	3.65	1.33	2.09	3.17	1.33	2.84	5.17	1.31
Atlanta	2.28	3.63	1.33	2.10	3.19	1.34	2.78	5.03	1.32
Rural Georgia	3.01	4.93	-	-	-	-	-	-	-
California	2.60	3.86	1.56	2.58	3.81	1.56	3.40	5.62	1.71
Greater Bay Area	2.39	3.48	1.50	2.24	3.21	1.44	3.14	5.15	1.56
San Francisco-Oakland	2.58	3.71	1.66	2.39	3.44	1.55	3.06	4.72	1.74
San Jose-Monterey	2.01	3.01	1.16	1.95	2.78	1.23	-	-	-
Los Angeles	2.47	3.79	1.44	2.36	3.58	1.40	3.77	6.60	1.74
Greater California	2.73	4.04	1.64	2.77	4.08	1.67	3.18	4.88	1.80
Connecticut	2.05	3.13	1.19	2.00	3.05	1.16	3.00	4.91	-
Detroit	2.72	4.28	1.48	2.47	3.93	1.30	3.70	6.01	2.05
Hawaii	2.94	4.43	1.59	4.03	5.79	2.05	-	-	-
Iowa	2.54	3.67	1.59	2.51	3.63	1.58	-	-	-
Kentucky	2.81	4.45	1.46	2.77	4.31	1.49	3.41	6.84	-
Louisiana	3.27	5.44	1.52	2.87	4.53	1.48	4.46	8.45	1.64
New Jersey	2.31	3.53	1.33	2.15	3.26	1.25	3.77	6.30	1.98
New Mexico	2.04	3.16	1.05	2.11	3.27	1.10	-	-	-
Seattle-Puget Sound	2.95	4.25	1.87	2.99	4.26	1.93	-	-	-
Utah	1.60	2.17	1.07	1.59	2.15	1.06	-	-	-
9 SEER Areas ^b	2.46	3.66	1.47	2.37	3.50	1.43	3.06	5.04	1.61
11 SEER Areas ^b	2.43	3.65	1.45	2.34	3.48	1.41	3.23	5.48	1.60
13 SEER Areas ^b	2.44	3.64	1.46	2.34	3.47	1.41	3.23	5.49	1.60
17 SEER Areas ^b	2.56	3.87	1.49	2.48	3.71	1.46	3.52	6.09	1.66
Total U.S.	2.55	3.90	1.43	2.44	3.67	1.42	3.55	6.33	1.55

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.
The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.
The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.
The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.
- Statistic not shown. Rate based on less than 16 cases for the time interval.

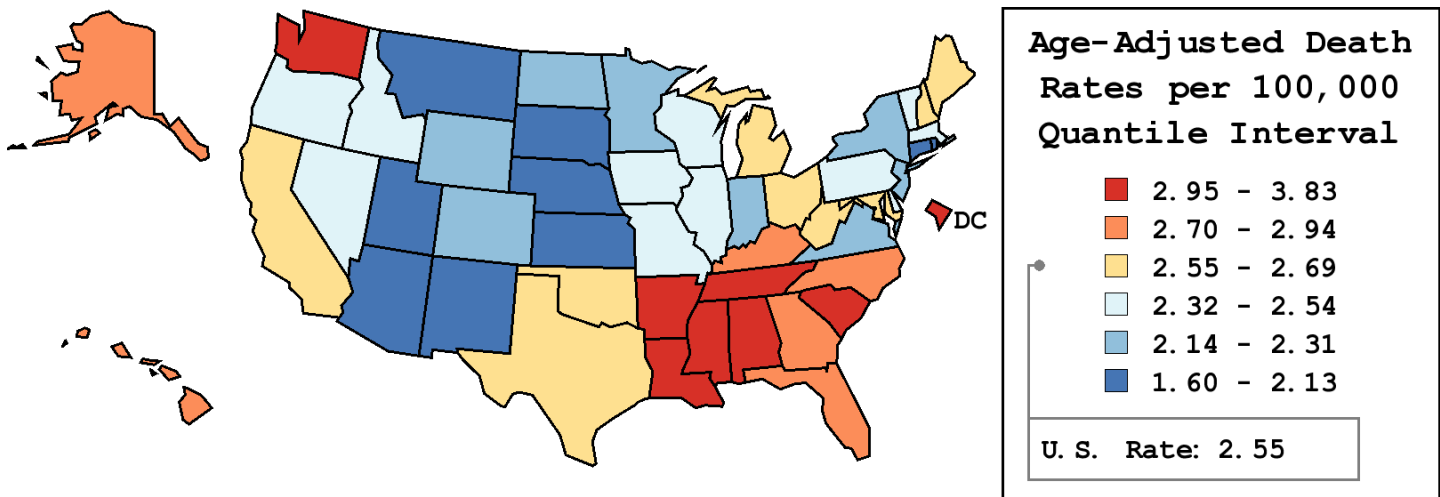
Table 20.24
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2003-2007

Males and Females

State	Rate	SE	Rank	PD
TOTAL U.S.	2.55	0.01		
High Five States				
D.C.	3.83	0.37	(01)	50.13 ^c
Mississippi	3.43 ^b	0.15	(02)	34.58 ^c
Louisiana	3.27 ^b	0.12	(03)	28.23 ^c
South Carolina	3.14 ^b	0.12	(04)	23.09 ^c
Alabama	3.09 ^b	0.11	(05)	21.14 ^c
Low Five States				
Connecticut	2.05 ^b	0.10	(47)	-19.70 ^c
New Mexico	2.04 ^b	0.14	(48)	-20.07 ^c
Nebraska	1.99 ^b	0.15	(49)	-21.71 ^c
South Dakota	1.95	0.21	(50)	-23.62 ^c
Utah	1.60 ^b	0.13	(51)	-37.02 ^c

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	3.09 ^b	0.11	(05)	21.14 ^c	Montana	2.12	0.20	(45)	-16.64 ^c
Alaska	2.84	0.38	(10)	11.53	Nebraska	1.99 ^b	0.15	(49)	-21.71 ^c
Arizona	2.09 ^b	0.08	(46)	-18.10 ^c	Nevada	2.54	0.15	(24)	-0.21
Arkansas	3.04	0.14	(07)	19.36 ^c	New Hampshire	2.69	0.20	(16)	5.46
California	2.60	0.04	(22)	1.88	New Jersey	2.31	0.07	(35)	-9.46
Colorado	2.17 ^b	0.10	(42)	-14.87	New Mexico	2.04 ^b	0.14	(48)	-20.07 ^c
Connecticut	2.05 ^b	0.10	(47)	-19.70 ^c	New York	2.25 ^b	0.05	(38)	-11.57
Delaware	2.45	0.23	(31)	-3.95	North Carolina	2.70	0.08	(14)	5.77
D.C.	3.83	0.37	(01)	50.13 ^c	North Dakota	2.21	0.25	(39)	-13.19
Florida	2.81 ^b	0.05	(12)	10.18	Ohio	2.67	0.07	(18)	4.79
Georgia	2.82	0.09	(11)	10.60	Oklahoma	2.69	0.12	(17)	5.40
Hawaii	2.94	0.20	(09)	15.19 ^c	Oregon	2.46	0.11	(29)	-3.63
Idaho	2.54	0.19	(26)	-0.47	Pennsylvania	2.32 ^b	0.06	(34)	-9.10
Illinois	2.49	0.06	(28)	-2.36	Rhode Island	2.13	0.19	(44)	-16.49 ^c
Indiana	2.26	0.08	(37)	-11.19	South Carolina	3.14 ^b	0.12	(04)	23.09 ^c
Iowa	2.54	0.12	(25)	-0.32	South Dakota	1.95	0.21	(50)	-23.62 ^c
Kansas	2.13	0.12	(43)	-16.24 ^c	Tennessee	3.04 ^b	0.10	(06)	19.40 ^c
Kentucky	2.81	0.11	(13)	10.12	Texas	2.61	0.05	(20)	2.26
Louisiana	3.27 ^b	0.12	(03)	28.23 ^c	Utah	1.60 ^b	0.13	(51)	-37.02 ^c
Maine	2.64	0.18	(19)	3.45	Vermont	2.32	0.26	(33)	-8.79
Maryland	2.58	0.10	(23)	1.13	Virginia	2.29	0.08	(36)	-10.25
Massachusetts	2.50	0.08	(27)	-2.05	Washington	2.98 ^b	0.10	(08)	17.08 ^c
Michigan	2.60	0.07	(21)	2.09	West Virginia	2.69	0.16	(15)	5.52
Minnesota	2.20 ^b	0.09	(41)	-13.81	Wisconsin	2.45	0.09	(30)	-3.70
Mississippi	3.43 ^b	0.15	(02)	34.58 ^c	Wyoming	2.20	0.29	(40)	-13.71
Missouri	2.38	0.09	(32)	-6.41					



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Difference between state rate and total U.S. rate is statistically significant ($p \leq .0002$).

^c Absolute percent difference between state rate and total U.S. rate is 15% or more.

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

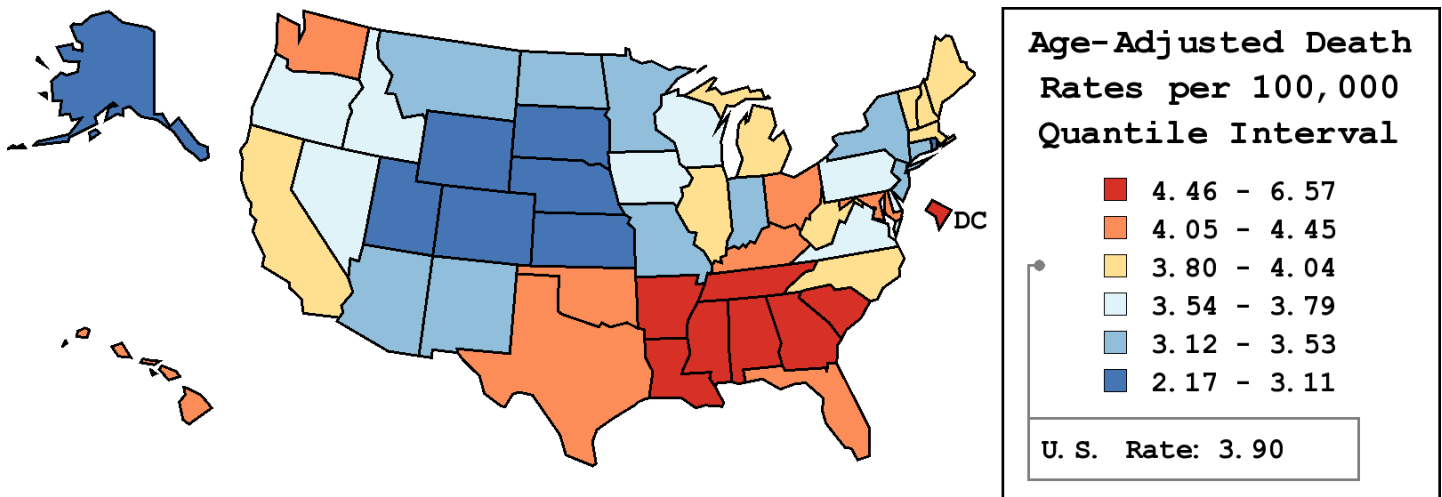
Table 20.25
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2003-2007

Males

State	Rate	SE	Rank	PD
TOTAL U.S.	3.90	0.02		
High Five States				
D.C.	6.57 ^b	0.75	(01)	68.55 ^c
Mississippi	5.77 ^b	0.30	(02)	47.91 ^c
Louisiana	5.44 ^b	0.24	(03)	39.49 ^c
South Carolina	5.13 ^b	0.23	(04)	31.42 ^c
Arkansas	4.99 ^b	0.27	(05)	27.83 ^c
Low Five States				
Nebraska	2.90 ^b	0.27	(47)	-25.63 ^c
Wyoming	2.89	0.50	(48)	-25.81 ^c
Alaska	2.85	0.55	(49)	-27.03 ^c
South Dakota	2.83	0.38	(50)	-27.36 ^c
Utah	2.17 ^b	0.22	(51)	-44.23 ^c

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	4.93 ^b	0.22	(06)	26.52 ^c	Montana	3.20	0.37	(39)	-18.03 ^c
Alaska	2.85	0.55	(49)	-27.03 ^c	Nebraska	2.90 ^b	0.27	(47)	-25.63 ^c
Arizona	3.15 ^b	0.15	(42)	-19.30 ^c	Nevada	3.57	0.26	(32)	-8.57
Arkansas	4.99 ^b	0.27	(05)	27.83 ^c	New Hampshire	3.90	0.36	(22)	0.12
California	3.86	0.07	(23)	-1.03	New Jersey	3.53	0.13	(35)	-9.50
Colorado	2.91 ^b	0.18	(46)	-25.40 ^c	New Mexico	3.16	0.27	(41)	-19.10 ^c
Connecticut	3.13 ^b	0.19	(43)	-19.63 ^c	New York	3.49 ^b	0.09	(36)	-10.44
Delaware	3.79	0.44	(26)	-2.74	North Carolina	4.04	0.15	(17)	3.56
D.C.	6.57 ^b	0.75	(01)	68.55 ^c	North Dakota	3.24	0.45	(38)	-16.97 ^c
Florida	4.31 ^b	0.09	(12)	10.46	Ohio	4.08	0.12	(15)	4.67
Georgia	4.57 ^b	0.17	(08)	17.23 ^c	Oklahoma	4.08	0.22	(16)	4.58
Hawaii	4.43	0.37	(10)	13.72	Oregon	3.63	0.20	(30)	-6.82
Idaho	3.63	0.34	(31)	-7.00	Pennsylvania	3.64	0.11	(29)	-6.74
Illinois	3.80	0.12	(25)	-2.68	Rhode Island	3.08	0.35	(45)	-21.08 ^c
Indiana	3.47	0.16	(37)	-11.11	South Carolina	5.13 ^b	0.23	(04)	31.42 ^c
Iowa	3.67	0.22	(27)	-5.93	South Dakota	2.83	0.38	(50)	-27.36 ^c
Kansas	3.11 ^b	0.22	(44)	-20.24 ^c	Tennessee	4.85 ^b	0.19	(07)	24.31 ^c
Kentucky	4.45	0.22	(09)	14.23	Texas	4.11	0.10	(14)	5.30
Louisiana	5.44 ^b	0.24	(03)	39.49 ^c	Utah	2.17 ^b	0.22	(51)	-44.23 ^c
Maine	3.99	0.34	(19)	2.37	Vermont	3.97	0.52	(21)	1.92
Maryland	4.17	0.19	(13)	6.82	Virginia	3.56	0.15	(33)	-8.72
Massachusetts	3.85	0.16	(24)	-1.40	Washington	4.33	0.18	(11)	11.01
Michigan	3.98	0.13	(20)	2.05	West Virginia	4.02	0.29	(18)	3.20
Minnesota	3.19 ^b	0.17	(40)	-18.12 ^c	Wisconsin	3.64	0.17	(28)	-6.73
Mississippi	5.77 ^b	0.30	(02)	47.91 ^c	Wyoming	2.89	0.50	(48)	-25.81 ^c
Missouri	3.53	0.16	(34)	-9.41					



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
^b Difference between state rate and total U.S. rate is statistically significant ($p \leq .0002$).
^c Absolute percent difference between state rate and total U.S. rate is 15% or more.
SE Standard error of the rate.
PD Percent difference between state rate and total U.S. rate.

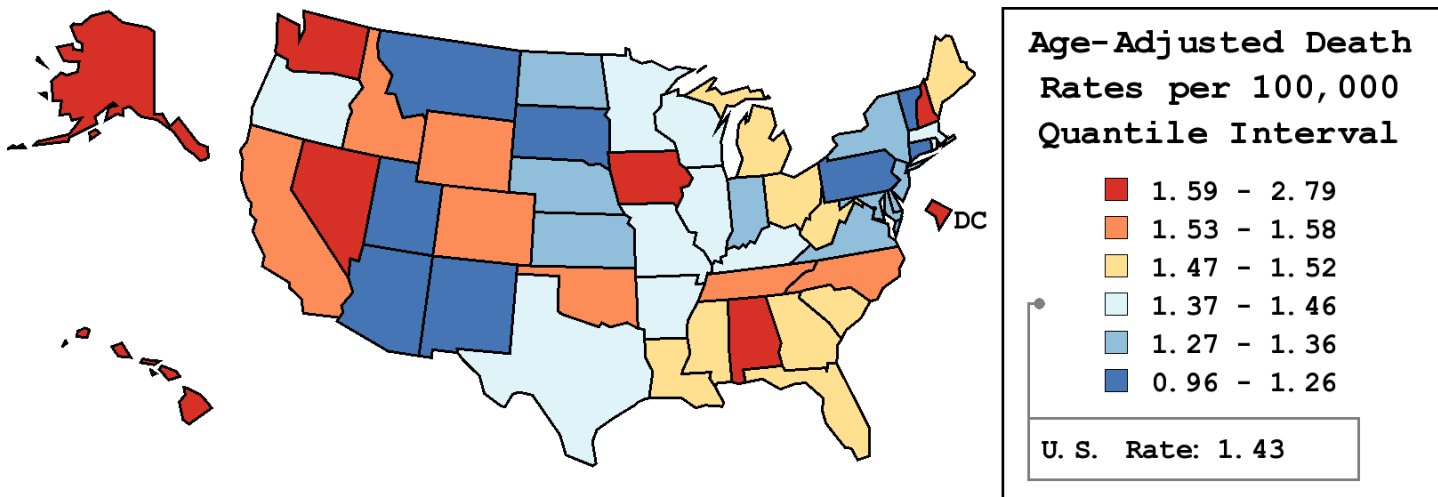
Table 20.26
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2003-2007

Females

State	Rate	SE	Rank	PD
TOTAL U.S.	1.43	0.01		
High Five States				
Alaska	2.79	0.54	(01)	94.88 ^c
D.C.	1.87	0.34	(02)	30.13 ^c
Washington	1.84 ^b	0.11	(03)	28.69 ^c
New Hampshire	1.64	0.21	(04)	14.59
Alabama	1.63	0.11	(05)	13.81
Low Five States				
Connecticut	1.19	0.10	(47)	-17.27 ^c
Arizona	1.16	0.08	(48)	-18.81 ^c
Utah	1.07	0.15	(49)	-25.48 ^c
New Mexico	1.05	0.14	(50)	-26.47 ^c
Vermont	0.96	0.22	(51)	-32.76 ^c

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	1.63	0.11	(05)	13.81	Montana	1.20	0.21	(45)	-16.27 ^c
Alaska	2.79	0.54	(01)	94.88 ^c	Nebraska	1.27	0.16	(41)	-11.24
Arizona	1.16	0.08	(48)	-18.81 ^c	Nevada	1.61	0.17	(06)	12.20
Arkansas	1.42	0.13	(31)	-0.72	New Hampshire	1.64	0.21	(04)	14.59
California	1.56	0.04	(11)	8.83	New Jersey	1.33	0.07	(36)	-7.08
Colorado	1.58	0.12	(09)	10.24	New Mexico	1.05	0.14	(50)	-26.47 ^c
Connecticut	1.19	0.10	(47)	-17.27 ^c	New York	1.27 ^b	0.05	(42)	-11.35
Delaware	1.33	0.23	(38)	-7.49	North Carolina	1.57	0.08	(10)	9.43
D.C.	1.87	0.34	(02)	30.13 ^c	North Dakota	1.36	0.26	(35)	-5.33
Florida	1.51	0.05	(18)	5.26	Ohio	1.50	0.06	(20)	4.58
Georgia	1.49	0.08	(22)	3.99	Oklahoma	1.55	0.12	(12)	8.43
Hawaii	1.59	0.20	(08)	11.18	Oregon	1.46	0.12	(27)	1.76
Idaho	1.55	0.21	(14)	7.83	Pennsylvania	1.26	0.05	(44)	-11.99
Illinois	1.41	0.06	(32)	-1.35	Rhode Island	1.43	0.21	(29)	-0.53
Indiana	1.29	0.08	(40)	-9.79	South Carolina	1.52	0.11	(17)	5.79
Iowa	1.59	0.13	(07)	11.25	South Dakota	1.19	0.22	(46)	-17.11 ^c
Kansas	1.33	0.13	(37)	-7.28	Tennessee	1.55	0.09	(13)	8.15
Kentucky	1.46	0.11	(25)	2.13	Texas	1.37	0.05	(34)	-4.12
Louisiana	1.52	0.11	(16)	6.12	Utah	1.07	0.15	(49)	-25.48 ^c
Maine	1.50	0.18	(19)	4.78	Vermont	0.96	0.22	(51)	-32.76 ^c
Maryland	1.31	0.09	(39)	-8.70	Virginia	1.27	0.08	(43)	-11.44
Massachusetts	1.46	0.09	(28)	1.57	Washington	1.84 ^b	0.11	(03)	28.69 ^c
Michigan	1.48	0.07	(23)	3.19	West Virginia	1.50	0.16	(21)	4.49
Minnesota	1.39	0.10	(33)	-3.10	Wisconsin	1.46	0.09	(26)	1.87
Mississippi	1.47	0.13	(24)	2.23	Wyoming	1.53	0.33	(15)	6.77
Missouri	1.43	0.09	(30)	-0.55					



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
^b Difference between state rate and total U.S. rate is statistically significant ($p \leq .0002$).
^c Absolute percent difference between state rate and total U.S. rate is 15% or more.
SE Standard error of the rate.
PD Percent difference between state rate and total U.S. rate.

Table 20.27
Cancer of the Oral Cavity and Pharynx (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2007
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <17 ^e	0 to <32 ^e	>=32 ^g	Complete ^h	
Race	Sex											
All Races ^b	Both Sexes	91,178	55,462	36,425	23,483	15,715	10,014	194,136	235,609	13,757	249,366	
	Males	62,485	36,207	23,169	14,155	9,229	5,863	128,665	153,118	7,994	161,112	
	Females	28,693	19,255	13,256	9,328	6,486	4,151	65,471	82,491	5,763	88,254	
White ^b	Both Sexes	78,100	48,449	31,721	20,976	14,013	8,823	168,105	205,072	11,682	216,754	
	Males	54,180	31,962	20,506	12,855	8,448	5,348	112,812	135,130	6,846	141,976	
	Females	23,920	16,487	11,215	8,121	5,565	3,475	55,293	69,942	4,836	74,778	
Black ^b	Both Sexes	7,594	3,986	2,704	1,340	1,057	672	14,962	17,544	705	18,249	
	Males	4,883	2,369	1,468	667	455	233	9,033	10,157	279	10,436	
	Females	2,711	1,617	1,236	673	602	439	5,929	7,387	426	7,813	
Asian/ Pacific Islander ^c	Both Sexes	3,410	2,033	1,285	+	+	+	7,068	+	+	+	
	Males	2,130	1,232	752	+	+	+	4,324	+	+	+	
	Females	1,280	801	533	+	+	+	2,744	+	+	+	
Hispanic ^d	Both Sexes	4,180	2,382	1,565	+	+	+	8,517	+	+	+	
	Males	2,682	1,475	872	+	+	+	5,218	+	+	+	
	Females	1,498	907	693	+	+	+	3,299	+	+	+	

Estimated prevalence percent^a on January 1, 2007, of the SEER 11 population diagnosed in the previous 17 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)									Age-Adjusted ^f	
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages	
Race	Sex											
All Races ^c	Both Sexes	0.0560%	0.0004%	0.0020%	0.0059%	0.0147%	0.0431%	0.1132%	0.1848%	0.2205%	0.2027%	0.0556%
	Males	0.0748%	0.0002%	0.0019%	0.0055%	0.0144%	0.0563%	0.1671%	0.2806%	0.3238%	0.2993%	0.0797%
	Females	0.0376%	0.0005%	0.0021%	0.0063%	0.0150%	0.0299%	0.0617%	0.0980%	0.1402%	0.1488%	0.0353%
White ^c	Both Sexes	0.0594%	0.0004%	0.0019%	0.0055%	0.0132%	0.0407%	0.1145%	0.1941%	0.2330%	0.2132%	0.0569%
	Males	0.0801%	0.0003%	0.0015%	0.0049%	0.0130%	0.0542%	0.1709%	0.2935%	0.3433%	0.3211%	0.0823%
	Females	0.0387%	0.0005%	0.0023%	0.0063%	0.0134%	0.0268%	0.0588%	0.1016%	0.1450%	0.1537%	0.0350%
Black ^c	Both Sexes	0.0370%	-	0.0029%	0.0053%	0.0128%	0.0381%	0.0985%	0.1488%	0.1672%	0.1164%	0.0444%
	Males	0.0479%	-	0.0044%	0.0066%	0.0110%	0.0455%	0.1452%	0.2356%	0.2555%	0.1377%	0.0629%
	Females	0.0270%	-	0.0014%	0.0040%	0.0143%	0.0316%	0.0597%	0.0815%	0.1080%	0.1061%	0.0303%
Asian/ Pacific Islander ^c	Both Sexes	0.0513%	-	0.0012%	0.0085%	0.0218%	0.0587%	0.1097%	0.1392%	0.1669%	0.1539%	0.0509%
	Males	0.0646%	-	0.0016%	0.0083%	0.0225%	0.0750%	0.1491%	0.2096%	0.2225%	0.2109%	0.0682%
	Females	0.0388%	-	-	0.0086%	0.0211%	0.0437%	0.0752%	0.0793%	0.1259%	0.1169%	0.0366%
Hispanic ^d	Both Sexes	0.0183%	0.0003%	0.0010%	0.0029%	0.0076%	0.0215%	0.0562%	0.1000%	0.1270%	0.1316%	0.0306%
	Males	0.0219%	-	0.0009%	0.0022%	0.0072%	0.0257%	0.0737%	0.1477%	0.1938%	0.1730%	0.0419%
	Females	0.0145%	-	0.0012%	0.0038%	0.0080%	0.0169%	0.0395%	0.0592%	0.0781%	0.1075%	0.0215%

^a US 2007 cancer prevalence counts are based on 2007 cancer prevalence proportions from the SEER registries and 1/1/2007 US population estimates based on the average of 2006 and 2007 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^{b c d} Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

^e Maximum limited-duration prevalence: 32 years for 1975-2007 SEER 9 data; 17 years for 1990-2007 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^f Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

^{g h i} (g) Cases diagnosed more than 32 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <32 and >=32. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.

+ Not available.

Table 20.28

Cancer of the Oral Cavity and Pharynx (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2003-2007
All Races, Both Sexes, by site

Histology ^a	Oral Cavity and Pharynx		Lip		Tongue		Salivary Gland		Floor of Mouth	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Epidermoid carcinoma ^b (8051-8131)	32,099	83.0%	2,602	94.9%	10,484	96.7%	972	21.1%	2,160	96.0%
Squamous cell carcinoma (8070-8078,8083-8084)	31,094	80.4%	2,509	91.5%	10,289	94.9%	915	19.9%	2,133	94.8%
Adenocarcinoma (8050,8140-8147,8160-8162,8180-8221,8250-8507,8514,8520-8551,8560,8570-8574,8576,8940-8941)	4,290	11.1%	99	3.6%	172	1.6%	2,932	63.7%	69	3.1%
Other specific carcinomas (8012-8015,8030-8046,8150-8155,8170-8180,8230-8249,8508,8510-8513,8561-8562,8575,8580-8671)	444	1.1%	-	-	27	0.2%	234	5.1%	-	-
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	1,376	3.6%	-	-	112	1.0%	311	6.8%	-	-
Sarcoma and soft tissue (8680-8713,8800-8921,8990-8991,9040-9044,9120-9136,9150-9252,9370-9373,9540-9582)	179	0.5%	-	-	20	0.2%	47	1.0%	-	-
Other specific types (8720-8790,8930-8936,8950-8983,9060-9110,9260-9365,9380-9539)	189	0.5%	-	-	-	-	74	1.6%	-	-
Unspecified (8000-8005)	106	0.3%	-	-	18	0.2%	34	0.7%	-	-
Total	38,683	100.0%	2,743	100.0%	10,842	100.0%	4,604	100.0%	2,250	100.0%

Histology ^a	Gum and Other Mouth		Nasopharynx		Oropharynx and Tonsil		Hypopharynx		Other Oral Cavity and Pharynx	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Epidermoid carcinoma ^b	4,297	80.0%	1,567	63.6%	7,099	97.0%	2,367	96.5%	551	86.6%
Squamous cell carcinoma	4,066	75.7%	1,298	52.7%	6,998	95.6%	2,339	95.4%	547	86.0%
Adenocarcinoma	872	16.2%	59	2.4%	51	0.7%	18	0.7%	18	2.8%
Other specific carcinomas	21	0.4%	73	3.0%	36	0.5%	25	1.0%	-	-
Unspecified, Carcinoma, NOS	57	1.1%	706	28.6%	111	1.5%	26	1.1%	32	5.0%
Sarcoma and soft tissue	34	0.6%	42	1.7%	-	-	-	-	-	-
Other specific types	72	1.3%	-	-	-	-	-	-	-	-
Unspecified	16	0.3%	-	-	-	-	-	-	-	-
Total	5,369	100.0%	2,465	100.0%	7,322	100.0%	2,452	100.0%	636	100.0%

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

- Statistic not shown due to fewer than 16 cases during the time period.

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Oral Cavity and Pharynx, by Race and Sex

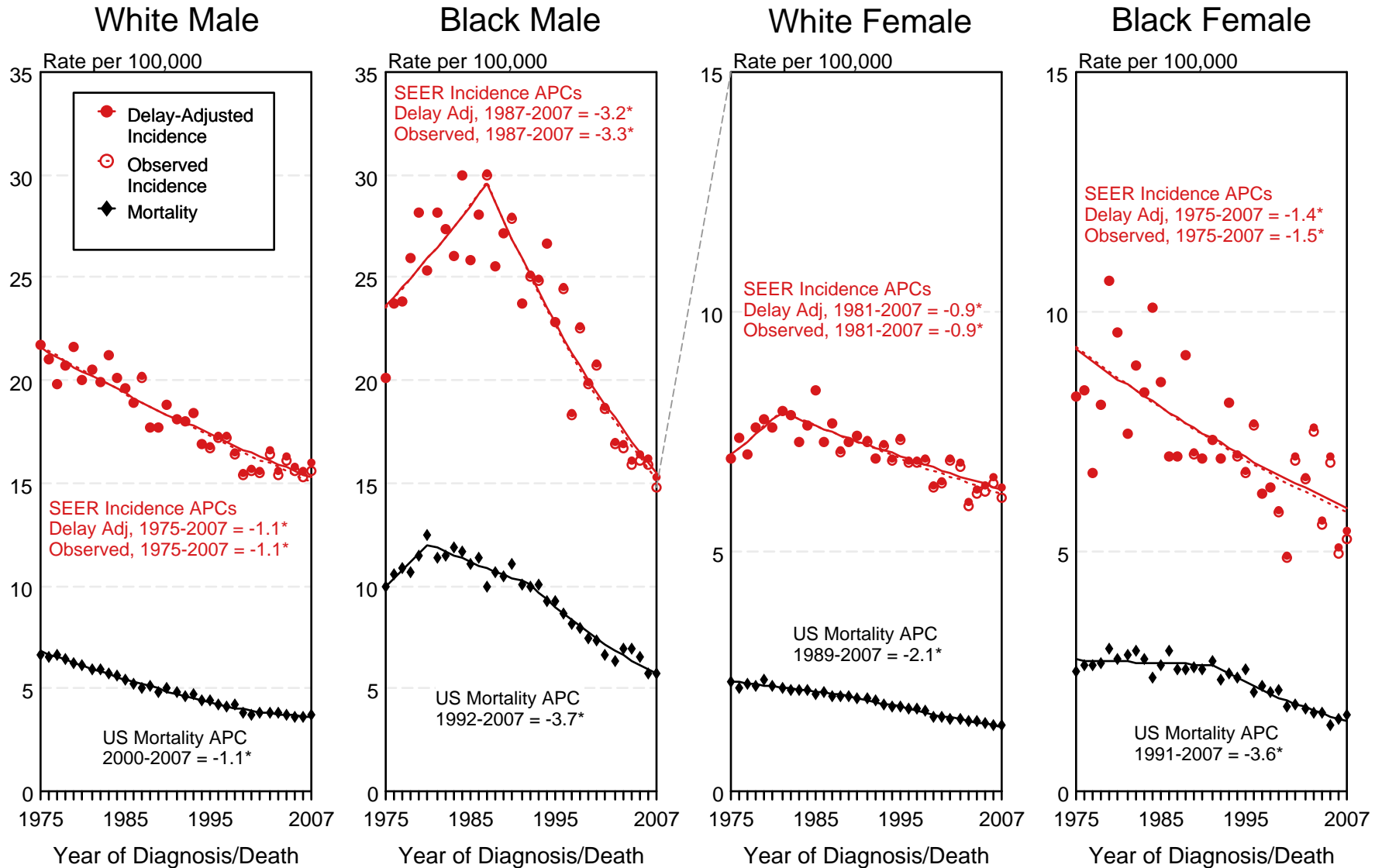


Figure 20.1

^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero ($p < 0.05$).

SEER Incidence and US Death Rates^a Cancer of the Oral Cavity and Pharynx, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2007
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2007

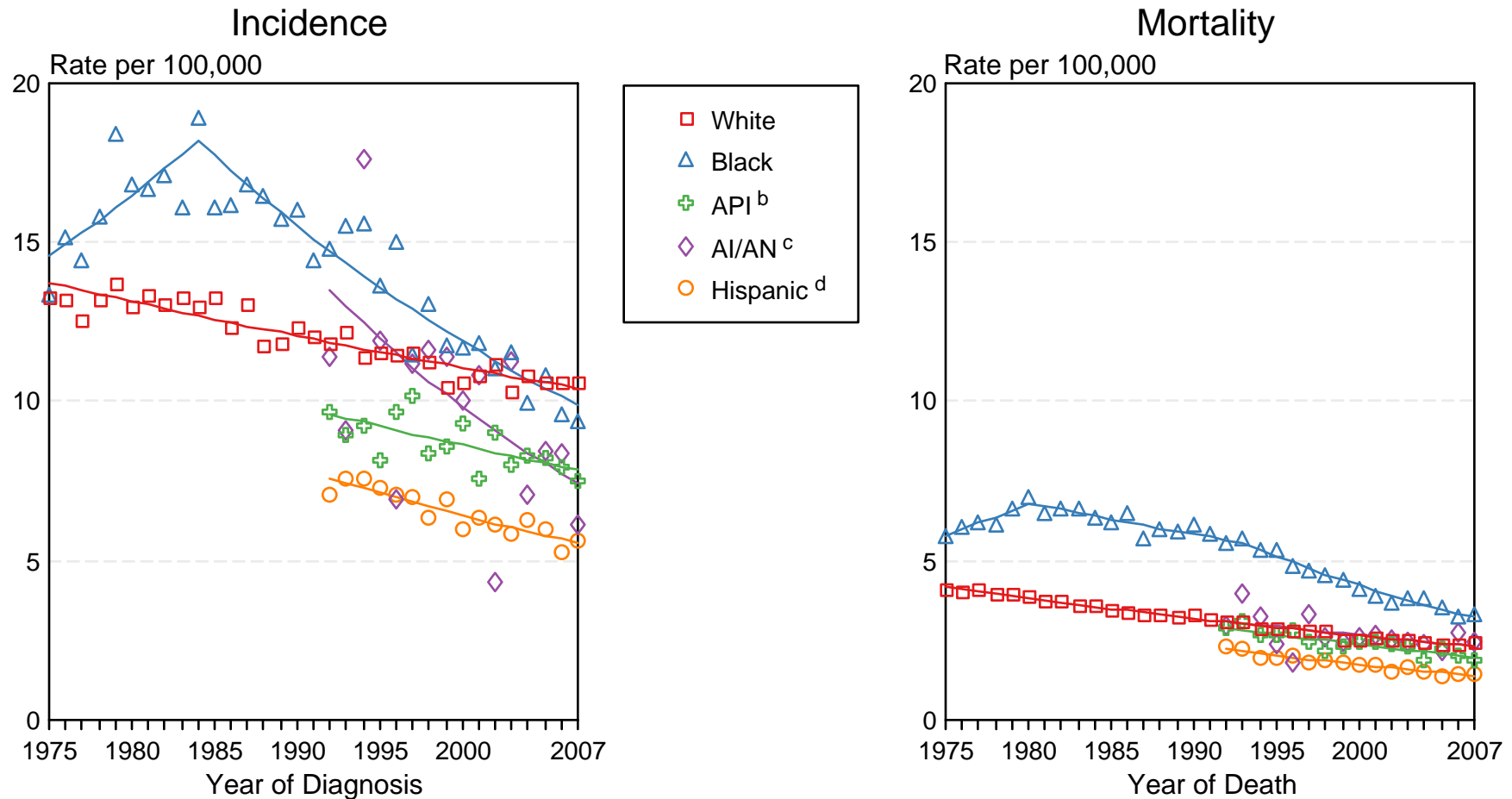


Figure 20.2

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2007 period allow a maximum of 4 joinpoints. Analyses for other ethnic groups during the period 1992-2007 allow a maximum of 2 joinpoints.

^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.

SEER Incidence Rates^a

Cancer of the Oral Cavity and Pharyngeal for Selected Subsites, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2007

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2007

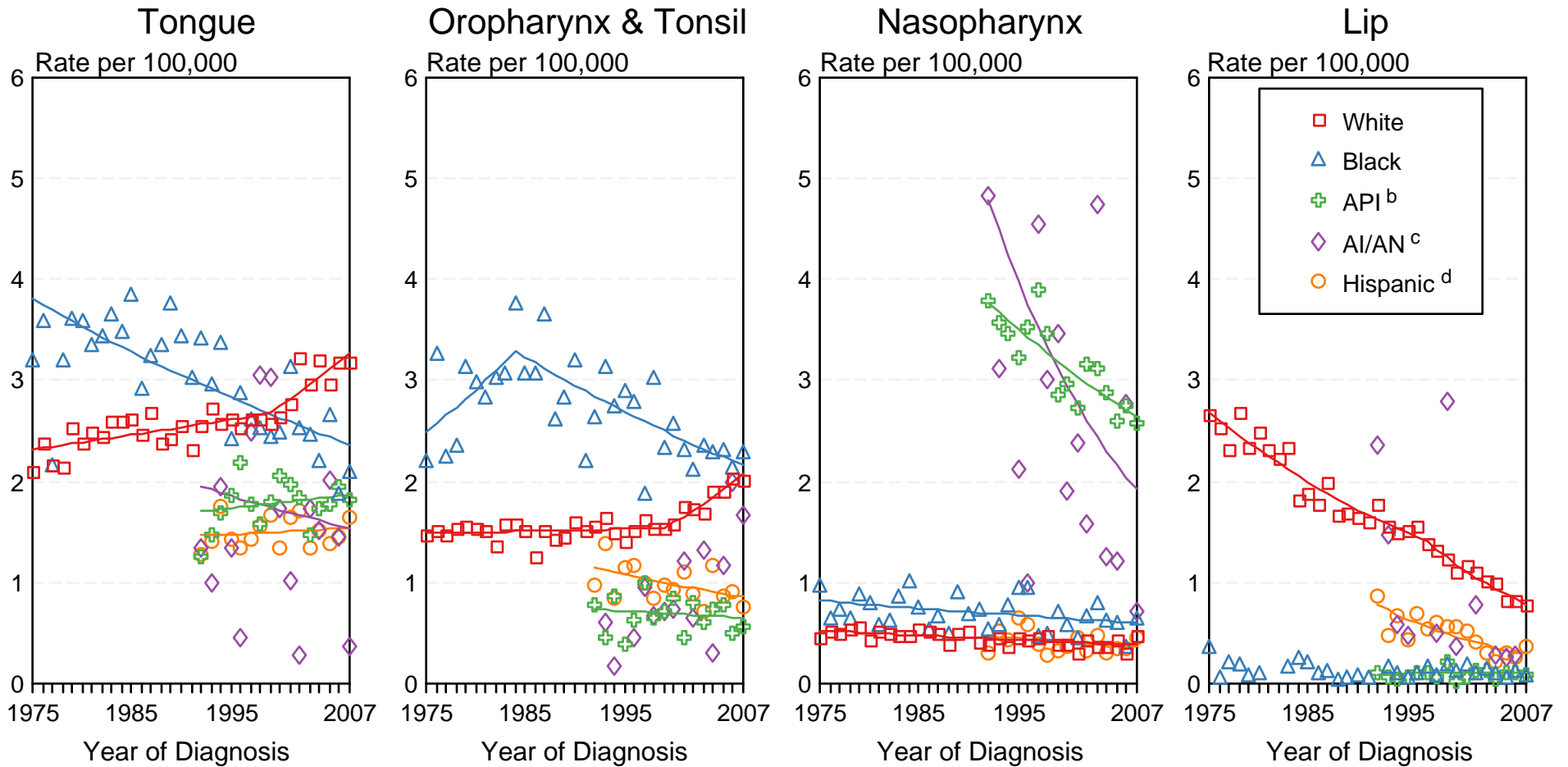


Figure XX-3

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2007 period allow a maximum of 4 joinpoints. Analyses for other ethnic groups during the period 1992-2007 allow a maximum of 2 joinpoints. Regression lines could not be calculated for data series that had at least one diagnosis year with a 0 case count.

^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Oral Cavity and Pharynx, Male, by Race

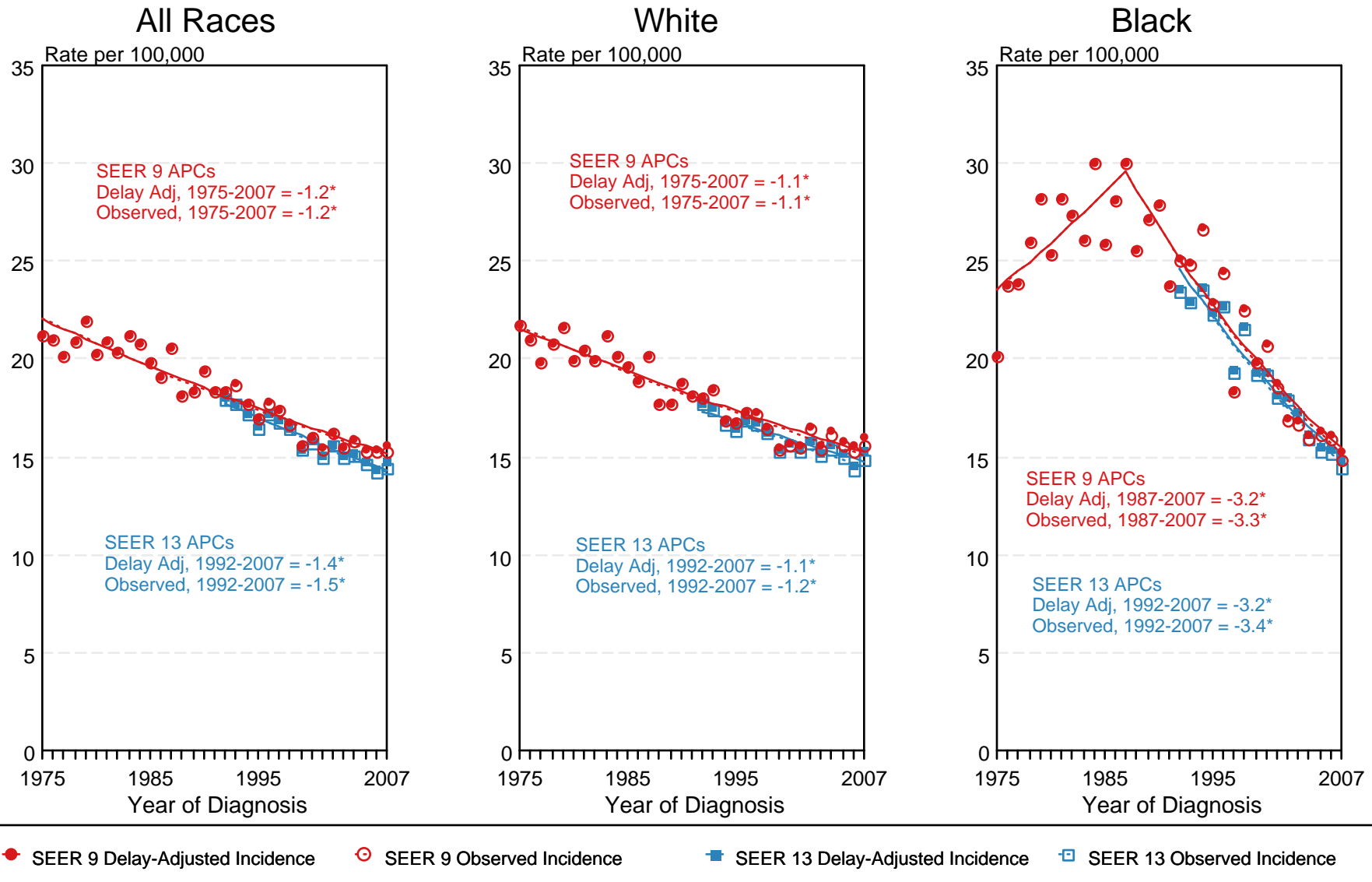


Figure 20.4

^a Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero ($p < 0.05$).

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Oral Cavity and Pharynx, Female, by Race

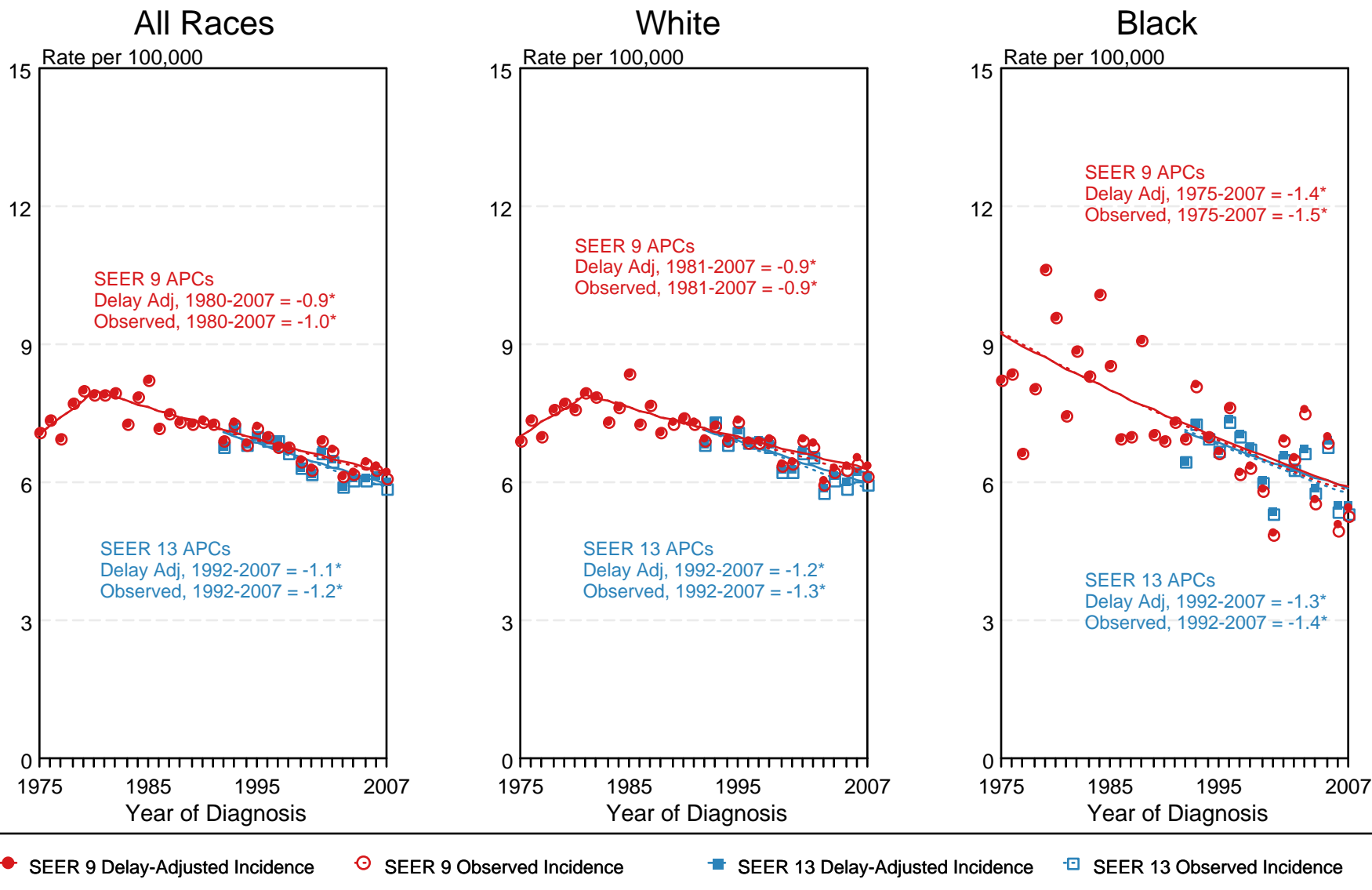


Figure 20.5

^a Source: SEER 9 areas and SEER 13 areas.
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
 * The APC is significantly different from zero ($p < 0.05$).